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## Small Unrecognized Strokes

### A Common Cause of Illness in Older Persons

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The gastro-enterologist sees many persons past forty complaining of abdominal pain or distress, indigestion, perhaps a sudden large loss in weight, perhaps an inability to work, perhaps aches and pains all over.

The diagnosis must be made from the history, which is that the distress came suddenly one day, perhaps with a fall, or a spell of dizziness, vomiting or mental confusion. Most significant in many cases is the associated disability which is out of proportion to the other symptoms. There may be character changes, loss of memory, loss of interests, and perhaps loss of all joy in life.

■ WHY should a gastro-enterologist be talking about little strokes? Because several times a month he sees patients with supposed indigestion or liver trouble who really have had a tiny stroke. Some little vessel in the brain has become plugged with a clot, and this has caused a small globule of brain to be destroyed. With this there may have been a dizzy spell, perhaps with nausea or vomiting or some mental confusion, or perhaps a sort of nervous storm running down the vagus nerves into the abdomen, there to produce a distressing feeling.

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Some of you will say, "But surely not every dizzy spell is due to a little stroke. Aren't most of them due to harmless changes in the ear or liver or colon?" Yes, many must be due to fairly harmless changes somewhere because they seem to leave no residue of injury to the body, and others may be due to a temporary spasm in a little blood vessel, but especially when severe vertigo is associated with some mental confusion and is followed by a nervous breakdown with decided changes in character, one can be almost certain that a small part of the brain has been destroyed by the thrombosis of a blood vessel.

I remember well a woman who, during the course of ten years, had many dizzy spells with nausea and vomiting. Some left her nervously shaken and unable to leave her bed for a week or longer. With each one she aged a bit; she lost weight, and she lost some of her joy in life. Only one of these little strokes temporarily affected an arm and leg, and even the one that finally killed her failed to weaken a single muscle. What I wish to emphasize is that at necropsy sections of her brain were found to be speckled with areas of softening and the scars resulting from the healing of such areas. There were plenty there; enough to account for all of her dizzy spells, and all but one of the infarcts was in a so-called silent area. I am sure that any good physician seeing her in one of her attacks of vomiting would have thought only to ask her what she had eaten a few hours before, and he would have been satisfied to prescribe a laxative and a few days of light diet. Only the members of the family who watched the results of each successive injury to her brain could guess what was actually happening.

Big strokes are common enough and surely lit-

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tle ones must be even commoner. As Janeway and Osler pointed out years ago, a large percentage of people with high blood pressure die a brain death. Little by little, during the course of ten years or more, the brain is destroyed, and as it goes the poor victim ages and becomes more slowed up. The same thing happens to an even greater number of aging women who haven't hypertension.

The sad fact is that we physicians were never trained to recognize the little strokes when they come. Even when someone tells us that a patient has had a stroke we, as a profession, are exceedingly reluctant to accept the diagnosis. We all depend so much on laboratory tests that we seldom think to take the type of history which alone will give us the diagnosis of a small stroke. Often this history can be obtained only from the family or from business associates. Only they will tell of the character changes which are so important and so revealing.

To illustrate: A little old lady complained of epigastric pain which came the minute she put food into her stomach. All roentgenologic and laboratory tests had failed to show anything wrong and every conceivable type of treatment had failed to help. Her physicians did not even suspect what was wrong because the assistant who had taken the history had not gotten any part of the all-important story. This was that the trouble had come at a certain minute of a certain day. Actually, at 7:30 in the morning of a certain Tuesday, while getting breakfast, she suddenly sat down and for the next two hours in a dazed sort of way kept asking over and over again, what had happened. When asked if the woman had suffered any change in character the husband said that in a moment she had been changed from an able, wide-awake, cheerful woman into a sad, apathetic and forgetful person who had to be looked after like a child. Interestingly, although to my way of thinking there was no question about her having had a stroke, her attending physicians thought this diagnosis too preposterous even to be entertained. There had been nothing in their medical training to prepare them for the idea.

### Points in the Diagnosis

To me it seems almost pathognomonic of a stroke when the fact can be established that an elderly person who formerly enjoyed good health, suddenly, at a certain minute of a certain day,

fell seriously ill. Perhaps he fell down and was a bit confused for awhile afterward. Perhaps he went to the hospital for a few weeks and was thought to have "intestinal flu" or some other vague disease. As has already been shown, he may have had a dizzy spell, and for a time afterward was fearful of walking without support. Sometimes the history is not so clear, but even then it may be established that the illness began one morning when the patient woke feeling upset and miserable or with a bad headache. In such cases what probably happened was that a blood vessel plugged up during the night when the blood pressure was at its lowest point. Many little strokes produce so little shock that they cannot be recognized even when they come during the waking hours.

The most pathognomonic point, which must never be glossed over, is that with a dizzy spell or a fall or an attack of vomiting, there came a decided change in character or temperament, perhaps with an increased irritability, a loss of efficiency, a loss of memory and interests, an inability to work, or an inability to feel any joy in life. It must be remembered that no disease of the abdominal organs, no matter how severe, can, in a moment, cause such a profound change in the character and health of the victim.

Often, when I have been unable to be sure from its nature that a particular episode represented a little stroke, I have felt fairly certain of it after I learned that the illness was preceded or followed by a series of other episodes which were obviously strokes with injuries to a motor or sensory nerve tract.

One other feature which, I believe, is almost pathognomonic of a small stroke is the discovery that a blood pressure which formerly was high, dropped to normal after the episode and perhaps then remained low.

### Symptoms that Arouse Suspicion

*Vertigo.*—As already noted, vertigo, especially when associated with nausea, vomiting, mental confusion and subsequent prostration, is sometimes due to thrombosis of a small artery in the brain.

*Paresthesia or Pain in Abdomen or Thorax.*—Some small strokes cause a sudden distress or even a severe pain in abdomen or thorax, and again, the diagnosis must be made from such facts as, (1) that the patient suffered mental con-

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fusion and perhaps later a nervous breakdown, (2) that at no time was there any sign of organic disease in thorax or abdomen, and perhaps, (3) that the patient did not recover in the slightest but drifted on with a step-like progression into arteriosclerotic dementia.

*Slight Bulbar Palsy.*—Occasionally, if the physician will inquire carefully he will get the story that following a dizzy spell or a fall or a curious attack of abdominal distress, there was some difficulty in swallowing, withropy saliva, and a tendency for food to enter the larynx and there produce violent coughing.

*Sudden Unexplained Loss of Weight.*—Occasionally the main symptom complained of by a patient who has had a small stroke is a sudden and permanent loss of from 20 to 60 pounds. All examinations will fail to show any cause for this, and with the passage of years it will become apparent that the cause could not have been cancer, hyperthyroidism, or any other such well-known disease. It would seem to have been due to injury to one of the little regulators in the hypothalamus which normally holds the body weight at a constant level.

*A Bad-tasting or Burning Mouth.*—An occasional woman of fifty or so will complain of a bitter or metallic or acid taste, or a burning in her mouth for which no local cause can be found. For years I have been coming more and more to suspect that these persons have suffered a slight injury to the brain or to some nerve tract or nerve supplying the mouth or tongue. These people are at the right age for a stroke, and their distress is typically incurable. I have never seen one of them helped by treatment of any kind.

*Pain in the Face or Head.*—In older persons some of the poorly understood and highly intractable pains in the face or head may well be due to a slight stroke. Again, the age is right; there may be strokes before and after the pain comes, and no treatment gives any relief.

*Diarrhea.*—In older persons sudden short attacks of diarrhea may be due to a little stroke which either disturbs the nerves to the bowel or from time to time causes the patient to go into a panic of fear that he is going insane or going to have a

stroke. As everyone knows, fear can easily produce diarrhea.

*Shuffling of the Feet.*—When an aging man suddenly begins to shuffle his feet a bit or to take small steps or to walk unsteadily one must think of arteriosclerotic changes in the brain and spinal cord.

*Insomnia.*—Insomnia coming suddenly and unaccountably in an older person who has previously slept well suggests that there has been a slight stroke.

*Over-emotionalism.*—A woman past middle age may suddenly find herself crying at the slightest excuse or for no reason at all. She will maintain that she is not melancholy and has no reason to be. Again, there probably has been an arteriosclerotic injury to some part of the thalamic region of the brain.

*Parkinson's Syndrome.*—Parkinson's syndrome may appear after one or a series of sudden episodes which suggested small strokes.

*Numbness.*—Many persons past middle age complain of numbness in an arm and hand which causes them to fear that they had a stroke or are going to have one, but my impression is that they are not more subject to strokes than are other persons.

### Prognosis

One good reason for making the diagnosis of a stroke is that so often, when there has been much injury to a certain part of the brain, the patient never improves in the slightest and remains a most unhappy invalid. In such cases the wise and kindly physician will not want to keep putting the patient through one long and futile examination after another; he will want to be saved the embarrassment of having promised a cure, and often he will want to warn the family that their wage-earner will never work again. He will want also to explain the situation to the family so they will understand and be more kindly, and less inclined to scold the patient and exhort him or her to snap out of it. When much of the brain is destroyed the patient cannot possibly "snap out of it."

Naturally, when the injury to the brain is a small one, and new ones do not come for a long

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time the patient can recover from an episode and can do very well. As I was writing this paper I saw two well-groomed wide-awake and able businessmen aged about fifty-five who, at the age of forty years had each had a stroke. One had a typical big one from which he recovered well, and only recently has he begun to have little ones. The other man had a little stroke which dropped his high blood pressure to normal, and he does not seem yet to have had another in spite of tremendous overwork.

Hence, when a patient asks anxiously if the fact that he has had a little stroke means that he'll soon have another we can answer, "Not necessarily, and it is no use worrying about it."

### Treatment

So far as I know there is no logical treatment except perhaps taking life more easy and avoiding excesses, especially of temper. There are drugs such as iodides which one can give, but it is impossible to determine if they do any good. In some cases soporifics are needed.

—MSMS—

## A Small Diphtheria Outbreak in Sturgis

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- IN spite of long-range diphtheria immunization programs now being conducted throughout the country, this preventable disease remains with us. Its eradication is still one of the goals of modern public health practice, and, although tremendous strides have been made toward this achievement, a feeling of complacency toward this disease is not justified.

Severe outbreaks of diphtheria occurring in various countries of Europe during the past fourteen years have been reported in the literature.<sup>1</sup> The therapeutic value of antitoxin in these instances was disappointing inasmuch as the so-called gravis form of diphtheria prevailed. It is entirely possible that similar outbreaks may occur in this country during the postwar period.

During the period July 1, 1941, to June 30, 1942, diphtheria outbreaks were reported from Lenawee, Oakland, Saginaw, and Clinton Counties in the State of Michigan.<sup>2</sup> The most severe outbreak occurred in Lenawee County where a migratory labor camp and a school were involved. The labor camp was made up of sugar beet agricultural workers, the population of which numbered 250. The total epidemic consisted of seventeen clinical cases of diphtheria, four of which died. Fourteen carriers were identified.

During the spring and summer of 1943, a rise in the incidence of diphtheria throughout Michigan was noted. Nearby states reported similar upturns.

The generally accepted reason for this sudden rise in the State of Michigan is the widespread shift of population groups into industrial areas occasioned by the war. Many of these migrants have never been immunized against diphtheria.

The following report comprises the results of an epidemiological investigation of a small diphtheria outbreak which occurred in Sturgis, Michigan, during the period June 4, 1943, to July 25, 1943. The total outbreak consisted of 11 clinical cases of diphtheria, with no deaths. Seven carriers were identified.

Sturgis has a population of 8,000, and is the center of an industrial area. It is located in St. Joseph County, and borders on the Indiana State boundary line.

### Diphtheria Outbreak, 1943

The cases in the table represent a group of persons with diphtheria, listed in chronological order as the diagnosis was made. The listing includes: age, sex, date of onset, diagnosis, complications, number of units of antitoxin administered, serum reaction, outcome, status of immunization, exposure to case, and source of milk supply.

In the group of eleven cases comprising the outbreak, multiple cases were discovered in four families. A study of the age groups revealed that five cases were children under eight, two were older children of sixteen and seventeen and four were adults. Nine of the eleven cases were females. The seasonal distribution of the cases was unusual in that the outbreak occurred during the summer; ordinarily the peak incidence of diphtheria is reached in late autumn and early winter. All cases were diagnosed as the pharyngeal form, the diagnosis being based on the presence of a

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Case No.	Name	Address	Age	Sex	Onset	Diag. Form Date	Complications	Anti-toxin Units Dates	Re-action	Out-come	Status of Immunization	Exposure to Case	Source of milk supply	Remarks
1	R.T.	2M St.	29 yr.	F	5-31-43	Pharyngeal 6- 4 43	None	20,000 6- 4-43	Yes	Recovered	No record	No history	A Diary	Patient employed in doctor's office
2	E.B.	4A St.	2 yr.	F	6- 5-43	Pharyngeal 6- 7-43	None	20,000 6- 7-43	No	Recovered	Not immunized	Yes	Private	
3	C.A.W.	4A St.	10 mo.	F	6-10-43	Pharyngeal 6-12-43	None	20,000 6-12-43	No	Recovered	Not immunized	Yes	Private	Relative of E.B.
4	J.F.	6B St.	40 yr.	F	6-10-43	Pharyngeal 6-14-43	None	20,000 6-14-43	No	Recovered	No record	No history	None	
5	J.S.	8C St.	2 yr.	F	6-23-43	Pharyngeal 6-25-43	None	30,000 6-25-43	No	Recovered	Not immunized	No history	B Dairy	Sister of M.S.
6	M.S.	8C St.	5 yr.	F	6-23-43	Pharyngeal 6-25-43	None	20,000 6-25-43	No	Recovered	Not immunized	No history	B Dairy	Sister of J.S.
7	W.S.	8C St.	26 yr.	F	7- 4-43	Pharyngeal 7- 5-43	None	20,000 7- 5-43	No	Recovered	No record	Yes	B Dairy	Mother of M.S. and J.S.
8	M.M.	10D St.	40 yr.	F	7- 2-43	Pharyngeal 7- 6-43	None	20,000 7- 7-43	No	Recovered	No record	No history	Private	Mother of W.M.
9	W.M.	10D St.	16 yr.	M	7- 2-43	Pharyngeal 7- 6-43	None	30,000 7- 7-43	No	Recovered	No record	No history	Private	Son of M.M.
10	P.G.	12E St.	17 yr.	M	7- 8-43	Pharyngeal 7-12-43	None	20,000 7-12-43	No	Recovered	No record	No history	C Dairy	
11	I.G.	12E St.	8 yr.	F	7-23-43	Pharyngeal 7-25-43	None	20,000 7-25-43	No	Recovered	Immunized	Yes	C Dairy	Sister of P.G.

diphtheritic membrane confirmed by bacteriological examination of discharges. All received a minimum of 20,000 U. of antitoxin shortly before or just as soon as the diagnosis was made. R. T. experienced a severe reaction in the form of serum sickness one week following the administration of antitoxin. Only one case gave a reliable history of successful immunization against diphtheria. Four cases gave a definite history of exposure to a previously diagnosed case. All cases reported a different source of milk supply.

One week following the administration of 20,000 U. of antitoxin, R. T. developed a severe case of serum sickness. She first complained of hives for two days and then developed the fol-

lowing signs and symptoms: sudden prostration with generalized edema of the face and extremities, generalized pain in the extremities and back, flushed face, and distant weak heart tones. She was hospitalized for a period of 4 weeks and recovered approximately two months following the onset of the reaction.

All cases recovered without any intervening complications.

#### Discussion

Epidemiological investigations were made on each case reported in order to determine, if possible, the source of the infection. A search was made for the following possible sources:

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(1) missed, mild, or unreported cases, (2) carriers among the household contacts by means of nose and throat culture surveys, (3) milk supply.

*Case 1.*—R. T. was employed in a local physician's office when she contracted the disease. She could give no history of exposure to a known case, but a possible source of her infection could be an unidentified carrier or a mild missed case.

*Cases 2 and 3:* E. B. and C. A. W. represent two children in a family of nine. One of the children, supposedly free from diphtheria, suffered a chronically infected nose before the onset of E. B.'s and C. A. W.'s illness. This condition was found to be diphtheritic, the diagnosis having been confirmed by a positive nose culture. It is believed that the source of the infection in E. B. and C. A. W. is the mild missed case of nasal diphtheria within the household.

*Case 4.*—J. F., an adult, gave no history of exposure and did not use milk. The source of her infection remains undetermined.

*Cases 5, 6, and 7.*—J. S., M. S. and W. S. represent a mother and her two children, all living together. No history of exposure to a case was elicited, but the third child in the family proved to be a carrier. It is believed that J. S. and M. S. contracted the disease from their carrier brother, and that the infection was passed on to W. S., the mother, while she cared for J. S., the baby of the family.

*Cases 8 and 9.*—M. M. and W. M. are mother and son, living together with the other members of the family. The remaining four members of the family were identified as carriers. It is believed that M. M. and W. M. contracted the disease from a carrier-member of the family.

*Cases 10 and 11.*—P. G. and I. G. are brother and sister, living together. I. G. contracted the infection from P. G., but P. G. gave no history of exposure to a case. Following the onset of I. G.'s illness, one other member of the family was discovered to be a carrier. The source of P. G.'s infection remains undetermined.

The fact that all cases used a different milk supply probably eliminated this possible source of infection.

It may be said that no common source of infection could be attributed to all eleven cases, but a total of seven carriers were identified.

One case, I. G., gave a history of previous immunization, but it is a known fact that cases of diphtheria may occur even in those inoculated. The failure to immunize successfully after inoculation has been reported by Park,<sup>4</sup> and this is not surprising because even an attack of the disease does not confer permanent immunity.

### Control Measures

The control measures instituted to check the spread of the infection were as follows: (1) quarantine of cases until two negative nose and throat cultures were obtained no less than twenty-four hours apart, (2) release of carriers when two consecutive cultures from the nose and throat, taken at intervals of not less than twenty-four hours, were negative, (3) close observation of extrahousehold contacts, (4) public health nursing service to the families, (5) checkup of milk supply.

The outbreak served as an impetus for an aggressive diphtheria immunization campaign in the city of Sturgis, and resulted in a marked increase in the number of immunizations done during this period. It afforded a grand opportunity for educating the public to the value of diphtheria immunization. Parents were urged to have their children immunized by the family physician.

The parents of those cases having enlarged tonsils were urged to have them removed after convalescence, as these cases may become convalescent carriers. As an attack of the disease does not confer permanent immunity, artificial immunization was also advised.

Diphtheria and poverty are often associated, and the disease commonly affects the children of poor white parents. Accordingly, improved housing conditions and sanitation are important in its control.<sup>2</sup>

### Summary and Conclusion

1. The report of an epidemiological investigation of a small diphtheria outbreak in Sturgis, St. Joseph County, Michigan, has been presented.
2. The outbreak comprised eleven cases, all of whom recovered.
3. A source of infection common to all cases could not be determined; however, four cases were traced to carriers, two to a missed case, two to a diagnosed case, and in three cases the source remained undetermined. Seven carriers were identified.
4. This outbreak demonstrates the need for continued long-range immunization programs.

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## Methods of Personality Study in Relation to Medical Practice

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Personality, as the organized system of attitudes through which one handles interpersonal relationships—well, poorly or perniciously—may greatly affect the organ systems through chronic and repetitive anxiety states and conditioned reactions. How may one recognize and characterize the personality trends disruptive of bodily health, in a manner useful in treatment? Discussion of the attitude examination and the use of the interview, social history and special techniques and tests in evaluating personality trends and their modifiability.

- IN the world of medicine today there is a very widespread and very active interest in the influence of emotion in matters of health and disease. The war has heightened this interest, not merely by producing a considerable crop of anxiety reactions, but by highlighting certain conditions, like peptic ulcer, in a manner to emphasize that emotional reactions sometimes ruin one's health. Just as the *germ* theory of disease served to generate, during the nineteenth century, a systematic development of medical science and of preventive medicine, so there are many indications now that the next great medical campaign for health is to be fought against *emotional factors* in disease. We need, of course, to recognize that emotional factors may be a powerful force for health, too. Experience tells us that many persons thrive under conditions of emotional stimulation which seem to blast or wither their less fortunate companions. We know that emotional maturity is only gained through emotional experience. We know enough of such matters to recognize that the individual *personality* is the principal determinant of such issues. We need to know much more in detail concerning the *manner* in which emotional experience is integrated and managed by the individual for good or for bad.

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I have undertaken to discuss with you today the special subject of *methods* in this general field of personality study. I hope to say something of potentially practical value to every medical man. I think it is safe to say that there is no medical man, carrying the responsibility for the care of patients, who does not have some medical problem on his hands which requires for its proper management some solution of a personality problem. To appreciate that the patient is a person, and to deal with the patient as a person—these are for many physicians natural and automatic aspects of the medical profession, simply a part of life as a physician. Such natural common sense is not, however, the fortunate possession of every physician. Even when present it can be improved by the insight and the methods developed in psychiatry.

We need not for our present purpose recapitulate the whole range of psychiatry, but I do wish to characterize and discuss three levels of psychiatric study which I will call, for convenience, formal, epithetic and thematic.

The most elementary and superficial level of psychiatric study is what I have called here the formal. All of you have had some contact with that type of work and will recognize promptly what I mean. I mean the symptomatologic description, analysis and delineation of types of insanity. These types were usually conceived of as specific mental diseases, for example, involution melancholia, dementia praecox, manic-depressive insanity, general paresis, paranoia, et cetera. Such study at its best performance called for a close examination of the patient, and a meticulous scrutiny of his behavior to detect whatever features were definitely abnormal or pathologic, and then the comparison and evaluation of such "positive findings" to arrive at a classification or diagnosis. In the keenest development of psychiatry at this level, as exemplified in Kraepelin's clinic, there was a sharp distinction between form and content. For example, in regard to hallucinations, the occurrence of hallucinations was primarily to be established as a definite abnormality of psychic function, characterized as visual, auditory, olfactory, et cetera, with, perhaps, some consideration of the degree of absurdity, but with the definite understanding that the content was not important. It did not matter what the voices said.

As a matter of history, it so happened that the

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period of high interest in this formal descriptive level of study was contemporaneous with a fairly elaborate development of mental status outlines and forms for examination and recording. It is perhaps inevitable that such parallelism would occur. Systematic records began to have prestige value, and a good psychiatric training came to be almost synonymous with the ability to write up "a full mental status report." One result was to fix in fairly rigid form the style of recording the psychiatric examination of the patient in terms of a formal résumé of abnormal items. Some of the remote consequences of this kind of training were unfortunate. I have had a number of internists in several cities tell me of experiences like this: "I like to keep up with the newer things, and when I saw that my colleagues elsewhere were getting real help from their psychiatric associates, I asked for consultations from a psychiatrist on some of my patients who seemed to have personality difficulties; but I just got back a report telling me how well the patient could subtract 7 from 100, that she was orientated in the three spheres, that her sensorium was clear and that no hallucinations, delusions or ideas of reference could be elicited." This was the end of psychiatric collaboration for that internist. Well, it is obvious that this type of mental status examination has little value in helping the internist to deal with the personality problems of his patients.\*

The second level of psychiatric study is what I have called the "epithetic," meaning by that to characterize an interest in the terms or epithets by which to designate the personal qualities of patients. "Adjectival" might be a nicer word for it. This adjectival or epithetic method of psychiatric study represented a stage of progress beyond the earlier preoccupation only with what was pathologic in the patient, and served to record the psychiatrists' growing appreciation that some attention to the wide range of human qualities and characteristics which lie within normal limits may be helpful in understanding the patients' development into full-blown mental illness. Adolf Meyer perceived in some dementia praecox conditions the influence of bad mental habits. He and August Hoch singled out one very significant characterization, the "shut-in" personality. Bleuler contributed "schizoid" and "syntonic." Jung probably scored the all-time high in popular acceptance with his fascinating dichotomy of

"introvert" and "extravert." Quite recently, from a nonpsychiatric source, we hear of Sheldon's "cerebrotonic," "somatotonic" and "viscerotonic" types of personality, in association with an elegant refinement of Kretchmer's body-types.

Psychiatric interest in personality has not remained restricted, however, to this "epithetic" level of typing and classifying. The question of formal diagnosis receded to the background as the individual patient, with all the rich content of his life experience, pathologic or normal, got the main spotlight of psychiatric interest. In large measure this brought a greatly increased interest in content as distinguished from form. This was a natural development from Freud's type of intensive study, and interest was stimulated by the remarkable revelations of psychoanalytic research, indicating unexpected connections between early life experience and certain rather specific forms of character development; but the psychoanalytic school was not alone in this work. Among other workers, too, biographic attention was focused on the individual evolution of personality trends as emotionally conditioned styles of interpersonal adjustment. The importance of personal emotional insecurity in personality development was overwhelmingly well established by many studies of the behavior problems of children. The queer statements and odd behavior of psychotic patients were more intensively scrutinized for clues to the character of the patient's pre-occupations as understandably related to the issues of his pre-psychotic and post-psychotic life. It is this level of psychiatric study which I have designated as "thematic." I mean to include under this designation of "thematic" the study of the special themes of a patient's preoccupation, and also the study of personality trends as they have developed out of plastic native disposition under social pressures. Such studies depend largely upon skill in eliciting and recognizing attitudes. How is this done?

On one side the business of recognizing a person's attitudes lies so much in the realm of obvious common sense that it seems superfluous to discuss it; on another side it ties in with complicated techniques of exploring the unconscious through free association, dream analysis and the acute observation of gestures, a region in which the "personal equation" of the observer may require rather elaborate study and control. The chief reason for discussing the clinical evalua-

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ation of attitudes lies in this practical, clinical importance both for the specialist and for general medicine. Physicians more and more appreciate that the presence of organic lesions does not preclude the operation of emotional and neurotic mechanisms; the patient is still a person, subject to the physiologic and pathologic effects of the clashes which may occur between poorly integrated attitudes.

It is therefore a very practical matter to inquire as to how the medical man can be helped to gain a further insight into, and some increased skill in the use of, psychiatric methodology at this third or "thematic" level, which deals with attitudes.

For their influence on health and disease there is one general class of attitudes which exceeds all others in importance—those attitudes which arise primarily out of personal relationships and which in turn determine how one relates oneself to others in subsequent experience. Man is a domesticated animal, although an imperfectly domesticated one. He finds, or fails to find, the meaning and value of life in personal relationships. It may seem otherwise at times, in individual cases—as if one fellow lived for the purpose of stimulating his palate with exquisite flavors, or another solely to accumulate wealth, or another to gain the admiration and flattery of the great outside world of strangers, to the neglect of those at home. But these apparently impersonal attitudes are in the main derivatives and residues of experiences in domestic relationships. What is of practical *methodological* significance, these more fundamental interpersonal attitudes, of which the apparently impersonal attitudes are secondary derivatives, are exhibited and available for study and appraisal in situations of a personal nature such as fall within the observation of the physician. The physician indeed has extraordinary opportunities and incentives for the study of interpersonal attitudes as they come out under difficulties. It is not a mere accident that some of the most penetrating character studies in the world's literature have been written by physicians.

As a school teacher, now, I am of course personally much occupied with the pedagogic aspects of this problem for the purpose of training young doctors for most effective service. You will perhaps pardon me, therefore, if my present discussion of this matter is contaminated by

some of the dry chalk dust from the lecture room or by a somewhat dogmatic hangover from ward rounds and student conferences. In the special practice of the psychiatrist, dealing with the most serious disturbances of personality function, the study of attitudes is, sometimes and in some respects, made easier by the exaggerated intensity of the patient's preoccupation with certain personal themes. I have followed the practice, and urge upon others to follow the practice of paying special attention to the more personal features in these cases, as a source of useful knowledge regarding individual difficulties in the organization and management of the patient's attitudes in interpersonal relationships.

The most obvious demonstration of the interpersonal attitudes operating in a patient occurs in the situation labeled "misidentification"; when a patient misidentifies the nurse or doctor as a character—say husband, father, uncle or lover—significant in her past life, invests him with the characteristics of that person (as conceived by the patient), and behaves toward him in some definite pattern, affectionately or contemptuously or spitefully or with exaggerated respect, et cetera. Such a situation reveals something of the patient's sentiments toward the character so personified.

A patient's attitudes may also be inferred from other considerations regarding his or her dramatization of the hospital situation. What roles does the patient assign to the persons about, and what attitudes does he show toward the characters so cast? Does he show attachments or aversions to particular persons? In what manner, and with what changes, sudden or gradual? A communicative patient may also reveal much about his attitudes while telling about his medical history, especially about the period of transition from adolescent to adult.

The sentiments, or attitudes, recognized and evaluated by such study do not reach an unmanageable diversity. There are many recognizable repetitions. The childhood setup, with its relatively few characters, provides the paradigms for most subsequent sentiment development. One might say that the sentiments of the adult are the sediments of his childhood.

There are even quite elaborate systems of sentiment-organization which are recognizably alike in different people. There is apparently in everyone a system of loyalty sentiments and se-

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curity sentiments, focused on the same persons or ideals, and knit closely together. There is a sentiment of independence, appearing in the reverse as a resentment of control, which has a marked growth in late adolescence, and not infrequently gets snarled with the loyalty-security system. There are of course innumerable complicated interactions of these main systems of security, loyalty and independence, involving the family, childhood gangs, school and college loyalties, hero worship; professional ethics and prejudices, or political, scientific and religious faiths. In the reconstructed histories of some patients one can trace the successive transference of such conflicts from one arena to another, without much growth or progress; in others, each new scene of adjustment occasions an enlargement and liberalization of the sentiments.

This discussion has dealt particularly with themes, attitudes and personality trends which are of direct practical significance in the kinds of patients we call psychotic and neurotic, but other persons do show reactions and behavior calling for a similar type of study and understanding. In particular, there are a number of widespread personality trends neatly characterized by words drawn from experience with neurotic patients. The obsessive trend and the perfectionistic attitude are well known. The sympathy-seeking attitude of the hypochondriac is often obvious. The seductive saintliness of the hysteric may be sensed by the acute observer while the patient enters the room and sits down.

Much practical help can also be gained by the physician from a consideration of the various evidences obtained regarding the patient's level of emotional maturity or immaturity. Maturity in the human being is not a fixed state of perfection, definable by a single criterion. Perhaps most of us here, being middle-aged, would regard as "emotional maturity" the set of attitudes characterizing middle age, thereby implying some superiority for attitudes of caution, tolerance and easy-going acceptance of things-as-they-are, in contrast to the impetuous urgency and competitive strenuousness of earlier years. It seems to me more useful, however, to omit the 100 per cent idea from the consideration of maturity in human development. Human nature is not like canteloupe or peach, with just one perfect moment of *absolute* maturity. Rather there are successive stages of development in interpersonal at-

titudes which characterize, roughly, different age groups and an individual's maturity or immaturity must be expressed as *relative* to these stages. To state or to imply that Johnny Jones, aged eighteen, is immature, is not very helpful. It is more helpful to state in which specific earlier stage of development his attitudes belong. Although there is not any generally accepted scale, one may find useful the following rough characterizations:

The *infantile* stage of emotional maturity is characterized by a complacent dependence and the expectation of infinite service and infinite tolerance from others, with petulance when not immediately gratified. (I wish to remind you in passing that there are some persons, chronologically middle-aged, who are emotionally almost infantile in this sense.)

The *childish* stage of emotional maturity is characterized by a limited range of secondary responsibility, with the expectation that this "responsibility" will be cancelled by the all-powerful parent by reason of any good excuse or ignorance. There remains, however, at this childish stage, a need for complete trust in another as the basis of any acceptable relationship. (The usual patient, when physically very ill, temporarily regresses to this childish level, and his need for complete trust in someone is a serious and important fact in medical management. During convalescence the patient, as you know, usually becomes again less trustful and more self-assertive.)

The *early adolescent* stage of emotional maturity is characterized by much concern over independence from parents and by hero-worship (that is, admiration for and devotion to extra-familial figures; frequently subject to explosive disruption), also by much interest in gangs, badges and exhibitionistic rivalries, pushing everything to extremes, and by a very self-conscious awareness of sex.

The *late adolescent* stage of emotional maturity is characterized by a "sophistication" pose, a "sophomoric" attitude, or a "line" of chatter, witticism and wise-cracks, whereby an appearance of greater maturity is sought. There is a tendency toward extreme idealism or cynicism or an idealization of aggressively strenuous competition, with much preoccupation with personal independence.

Our American culture sets a high value upon the "independence" and strenuousness characteristic

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of this stage and so tends to perpetuate the late adolescent style of emotional attitudes into adult years; nevertheless most Americans, as they advance into the twenties and thirties become comfortably reconciled to the practical realities of interdependence in economic and professional matters, lose some of the emotional urgency of competitive striving and accept candidly their own limitations and the limitations of others without feeling necessarily defeated thereby.

It is not an easily described clinical task to evaluate a patient's level of emotional maturity. In ordinary clinical work, however, this task is pointed up in a practical way by making this evaluation of maturity in respect to the outstanding feature of the patient's life situation, which is brought out by considering the theme of his main preoccupation.

In this discussion of the evaluation of levels of maturity and in this general presentation of the thematic level of psychiatric study, I have given little attention to the sex problems, and patients' attitudes thereto, which are a prolific source of anxiety and maladjustment. My neglect of this topic has not been due to any feeling that it is unimportant, but rather to the special difficulties which beset the evaluation of patients' attitudes regarding the sexual life. It is customary, in these "modern" times, for those in the medical profession to congratulate each other upon the liberation from previous taboos on the discussion of sex topics. But it has been my observation that many a young doctor, quizzing a patient in a so-called "objective" fashion down to the last intimate detail of sex practices, has failed very thoroughly to catch the emotional implications of the patient's attitudes in this field and has furthermore raised such a wall of emotional reserve as to block seriously his further emotional usefulness to the patient. I have therefore often been driven to think that our vaunted "objectivity" about sex is a false front. It would be silly to revert to a Victorian conspiracy of silence about sex, but it is exceedingly important to appreciate the individual patient's emotional tolerance for the discussion of personal sex problems, to respect his or her reticence and, above all, to provide time and opportunity for the patient's spontaneous self-revelation whereby one can sense implicit attitudes.

Ladies and gentlemen, I have been trying to present some of the leading concepts and prac-

tices of psychiatric study at the thematic level, as a method of personality study. This method depends primarily upon a shrewd and skillful use of the *interviews* between physician and patient, bolstered by other aids to *biographical* study.

Some of the *special techniques* of personality study should be mentioned. High on the list would be the psychoanalytic procedure of free association, through which much information has come to light regarding the emotional attitudes and personality trends which may have impelled the patient toward one or the other of the recognized psychosomatic illnesses, such as asthma, spastic colitis, hypertension, peptic ulcer.

The Rorschach experiment has gained much repute as a special method of personality study. What one reports seeing in a series of ink blots reveals in an extraordinary way the style of one's approach to other situations. This example of the use of unorganized stimuli, to which there is no "correct" response, permits and even solicits the spontaneous organizational reactivity of the subject and gives more abundant opportunity than do question and answer tests for the exhibition of personal characteristics.

We must recognize, of course, that a psychiatrist who is endowed with time, and assistants for research, has opportunities for such study of patients vastly greater than anything practicable for the regular physician. But other physicians also have two exceedingly good opportunities to size up the attitudes of the patient. One is the history-taking interview and the other is the physical examination. These two may often be combined, to their mutual improvement, and they may be combined with this attitude-examination, with still further improvement. One does not expect, of course, that the medical student, at the completion of his work for the degree, will be highly skilled in any of these three arts, or their combination, but it seems reasonable to try to help him get a basic orientation which will make him capable of considerable future self-development in the recognition and evaluation of patients' attitudes.

In attempting to train students in the attitude-examination, it has not seemed wise to prepare a routine outline or series of questions. One of the essentials of a good attitude-examination is a degree of freedom which permits and encourages the patient's spontaneity. An understanding

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of the more elementary principles of dynamic psychopathology seems a better guide than any special outline. Nevertheless, a few pertinent reminders may be of use.

1. First and probably most important of all, the chief complaint of the patient should be recorded in his or her own terms. The pernicious practice of translating the chief complaint into medical jargon may eliminate one of the most useful cues to the patient's attitude about this distress or disability.

2. Note the patient's manner of recounting his symptoms. Does he proceed with an air of all-absorbed interest, dramatizing pains and disabilities and dwelling upon them in an appeal for sympathy? Does he bring a piece of paper with detailed notes? Does the story of his illness have to be dragged out of him? Does he meet questions with hair-splitting qualifications or arguments? Does he appear indifferent to grave disabilities? Wherein does he seem to guard most carefully his self-respect?

3. As he tells about the course of his illness, note how the patient refers to the effects of his illness on his responsibilities or on his home life. Note his attitude toward those who have suffered or been inconvenienced by his illness, as compared with his own distress. In what way may his illness be providing a secondary gain?

These fragmentary suggestions are not offered as an outline of examination but as hints to help the doctor gain some impression of the patient's attitudes toward his illness, toward himself, toward the doctor (and hospital or clinic), and toward his responsibilities and other persons concerned.

The physician who can recognize and evaluate with reasonable correctness these personal attitudes of his patient, and who has at his command a fair working knowledge of psychopathologic dynamics, will have gained thereby a point of view on his patient's personal attitudes in positive terms. This appreciation of attitudes does not exclude organic pathology, nor does it depend upon the diagnosis of a functional disorder by exclusion of organic lesions. Even when the patient's attitudes are pathognomonic of one of the classical psychoneuroses, it is still important to

know if he has some organic disease. Hypochondriasis does not immunize to cancer, nor does hysteria immunize to brain tumor. Conversely, the discovery of ulcerative colitis, of mitral stenosis, of undulant fever, or even of an obvious hernia, does not of itself eliminate from medical consideration the attitudes and patterns of personality reaction which may be the factors hindering treatment, or limiting recovery or impelling the patient toward an unnecessary and miserable second-rate invalid adjustment in life. For the diagnostician to miss an organic lesion has been, quite properly, an occasion for some professional disgrace; now, with a more widespread understanding of the emotional forces which produce ill health, with a knowledge of how to examine for pathological attitudes and reactions and with an increased appreciation of psychotherapeutic resources, it should become a comparable professional disgrace to overlook personality disorders.

Even when the patient's illness appears altogether "functional" in origin, as the phrase goes, the physician who has taken advantage of his opportunities to evaluate the patient's attitudes will find, I think, that he has not driven the patient out on a diagnostic limb simply to be cut off and dropped into the lap of another specialist, but that he has established some common ground of respectful mutual understanding by which he himself may be therapeutically useful. If psychiatric referral proves necessary, and feasible, the physician can more constructively aid the patient to seek and accept specialized psychiatric assistance through having established this common ground of respectful mutual understanding.

## MSMS

### REINFUSION OF RED BLOOD CELLS

The practical aspects of the routine reinfusion of red cells may now receive some consideration. . . . In blood banks which draw their donors from a population having to travel considerable distances to the bank, the drawn blood could perhaps be immediately centrifuged and the cells reinfused on the same day. This would entail a somewhat longer wait but might eliminate the problem of post-transfusion syncope (fainting) . . .

It is pointed out in the conclusions that the investigators have projected a study "to determine the natural pacemaker of the frequency of plasma donations and thus to explore the feasibility of obtaining plasma at more frequent intervals than the prevailing eight-week minimum."—*Northwest Medicine*, March, 1944.

## Palindromic Rheumatism (Hench's Disease)

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A report of a case of palindromic rheumatism, a disease of multiple afebrile attacks resembling acute arthritis, periarthritis, and para-arthritis and which is characterized by pain, swelling and temporary disability of generally one, occasionally several, small or large joints in an adult. Despite hundreds of attacks in some patients, and thousands of attacks in aggregate, no evidence of permanent disability was demonstrable. The disease appears to be self-limiting in any single attack and may follow a similar or previous pattern in repeated attacks.

F. S., a white male patient, aged forty-three, was admitted to the Henry Ford Hospital on October 18, 1941, complaining primarily of right lower quadrant abdominal pain. The white blood count was 16,500; there was no fever. Appendectomy was performed the day of admission by a resident through a right rectus incision. Definite pus was found in the appendix and abdominal exploration revealed no other abnormality except some hardness of the head of the pancreas. The blood diastase was 20.1 the day of admission, 39.9 the day after operation, 32.5 on October 23, and 20.8 on October 26, 1941.

On October 31, 1941, the patient complained of a tender swelling of the first interphalangeal joint of the right index finger. The skin over this joint appeared tense and pale with no sign of involvement of other joints. There was no sign of lymphangitis or lymphadenitis. On further questioning, the patient stated that he had had similar attacks of pain and swelling in various joints since the age of eleven years. At that time he had pulled a poison ivy vine from a tree and the following day his hands began to itch and have been itching and swelling periodically since. Within the same week his feet began to swell and itch. From that date

until 1936 he had had biweekly swelling of the different joints of the feet, with occasional periods of daily attacks. He had had no attacks involving the feet since 1936 although he had received no treatment for this condition, except his own immersions into hot salt water, which relieved the itching but not the swelling nor the pain and tenderness.

The patient's hands, however, continued to swell and become painful, the affection usually involving individual joints, and most frequently the terminal interphalangeal joints. The larger joints of the arms and legs have never been involved. The attacks in the hands are more frequent than ever before and now average about four per week, occasionally every day, sometimes twice per week. The longest single attack lasted two days and one night, while the shortest attack was of two hours' duration. The attacks let up spontaneously and go as suddenly as they begin. They usually appear in the late afternoon and are worse at night. The patient has noticed no general symptoms. He has not consulted a physician for this trouble at any time. He states that the affected joints turn white when they swell. The only relief obtainable is for the itching which is benefited by immersion in warm salt solution. No swelling, discoloration, deformity of the joints, or limitation of motion has been noted between attacks.

A careful study of the patient's general history indicated no evidence of allergic background in his family. He himself presented no history of migraine, asthma or hay fever and no sign of reaction to external agents except that occurring due to the poison ivy at the age of eleven years.

Physical examination after recovery from the appendectomy revealed a healthy middle-aged male. No abnormality was noted between the attacks of rheumatism except dental caries, which the patient stated were only of a few years' duration, and chronic tonsillitis. The joints were examined carefully and there was no evidence of deformity or pathological change.

The laboratory data included negative blood tests for syphilis and urine examination which showed: specific gravity 1.024, alkaline reaction, no sugar and no albumin and microscopic findings of amorphous phosphates four plus and occasional leukocytes. The blood count showed hemoglobin 14.5 gm.; red cell count 5.46 millions; white blood count 16,500 (9,200 two days after operation), and differential at the time of the elevated total white blood count: polymorphonuclear neutrophiles 89 per cent, small lymphocytes 6 per cent, large lymphocytes 3 per cent, monocytes 1 per cent, and juveniles 1 per cent. The nonprotein nitrogen was 24.0, icteric index 8.2, and the diastase 39.9, the latter decreasing to 20.8 eight days after operation. Two days after operation the ascorbic acid level in the blood was 0.1 and 300 mgm. of vitamin C was given t. i. d. beginning October 26. The serum albumin level was 3.28 and the serum globulin 2.71 gm. per 100 c.c. The patient remained in the hospital twenty-seven days and was entirely fever free the last thirteen days.

**Summary.**—A case is reported with symptoms of thirty-two years' duration, similar to those presented by Hench and Rosenberg and named by them Palindromic Rheumatism.

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dromic Rheumatism. The past history of this patient is that of an average healthy male adult with the only unusual feature being the many and frequent attacks of pain and swelling in the joints of the hands and feet, the beginning of which he associates with the contact with "poison ivy" vines. Physical examination after recovery postoperatively from an appendectomy is negative except for dental caries of a few years' duration and slight evidence of chronic tonsillitis. There is no evidence of deformity or limitation of motion in the joints involved. The patient was last seen on November 24, 1941, thirty-seven days after operation. He was asked to return for further studies but did not do so.

### Comment

This patient was in the hospital with the diagnosis of the rheumatic attacks in doubt when the senior author (H. N. H.) attended the meeting of the Central Society for Clinical Research in Chicago, November, 1941. The description given the syndrome of palindromic rheumatism by Dr. Hench at that time was so dramatic, that the present case was immediately recognized as belonging to that classification. In this paper (Hench, 1941, and Hench and Rosenberg, 1942) a study was made of thirty-four cases of palindromic rheumatism seen at the Mayo Clinic. Features of the disease are multiple afebrile attacks of acute arthritis, periarthritis, and sometimes also para-arthritis, with pain, swelling, redness and disability of generally one, sometimes several, small or large joints in an adult of either sex. Follow-up data in twenty-seven of the thirty-four cases indicated that, although spontaneous cure occasionally occurred, the condition tended to continue with its pattern relatively unchanged, but permanent crippling did not occur despite thousands of attacks suffered during a total of three hundred and seven years of illness (two hundreds and forty-two years before plus sixty-five years after admission). In another paper (Hench and Rosenberg, 1941) these Mayo Clinic authors described the syndrome more fully. They applied the term "palindromic" which simply means "to recur" or "to return" and which is derived from a Greek word meaning literally "to run back."

Since this classic group of papers by Hench and his associate, L. D. Thompson (1941) and Mazar (1942) each reported one case while J. L. Thompson, Jr. (1942) reported two cases. The addition of our case which seems to fit the description of the thirty-eight others brings the total to thirty-nine.

### Summary

1. A case is reported of recurrent afebrile rheumatic attacks involving especially the small joints of the fingers and toes of a forty-three-year-old white man. This case seems to fit the description of palindromic rheumatism made by Hench and Rosenberg in 1941.

2. Adding our case to the thirty-eight that we were able to collect from the literature, this brings the total of cases of palindromic rheumatism on record to thirty-nine.

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## Wartime Obstetrics

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Personnel deficiencies are dictating many attempts to reduce the professional care of obstetric patients to the essentials consistent with safety for mother and baby. Luxury items must be eliminated, for time must be saved.

An attempt will be made to evaluate prewar ideas of adequate obstetric care and treatment in terms of their essentiality—what must be retained? what can be eliminated? how can available professional skills be spread thinner without undue additional risk? how do newer techniques fit into the theme of simplification?

■ THIS title was not intended to suggest that war brings any change in the objectives of obstetric care, but rather that it may alter the means by

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which these objectives are obtained. We must still aim at preserving "the life, health, and happiness of the mother and her child," and must not permit the present shortages of personnel and equipment and the significant rise in the birth rate to thwart this aim. I would like to mention some things which can compensate for this awkward situation as efforts at "streamlining obstetrics," but the usual connotation of that phrase emphasizes the luxury of the streamliner rather than the speed and safety of its progress. Wartime obstetrics should be stripped of its luxury items in the interest of speed and safety. Nothing essential should be omitted but the non-essential should be discarded. Perhaps we should call it "simplified" rather than "streamlined."

Prenatal care can scarcely be simplified except by the elimination of unnecessary laboratory work. The routine clinical observations on weight, blood pressure, urine, and general observation of the progress of the pregnancy would seem essential, whereas the withdrawal of blood for serologic study is demanded by many state laws. On the other hand, there is no good reason for routine blood studies when the hemoglobin concentration can be estimated from the appearance of the conjunctivæ as closely as by most clinical hemoglobinometers. Old-fashioned pelvimetry combined with intelligently performed abdominal and rectal palpation can well replace costly roentgen pelvimetry except in rare cases. In fact, the important size relationship between the fetal head and the pelvic inlet can be determined manually with conspicuous accuracy.

The gradual trend away from home confinement and toward hospital delivery has evidently been accelerated by the present emergency, since the latter takes less of the physician's time and permits him to carry on other professional duties while cervical dilation is proceeding under the watchful care of a nurse. The demand for obstetric beds has in many communities exceeded the supply and has resulted in two generally acceptable variations from usual practice—reduction in the length of post-partum hospitalization and putting two beds where there was only one. The time-honored ten days in bed after delivery are certainly not necessary for a safe and smooth convalescence, but there is no good evidence as to where the minimum may be. For some years, our normal puerpera have been allowed up six days after delivery and are discharged two days later if they reside in the city or three days later

if they live at some distance. Undoubtedly, an occasional patient does develop some late-appearing puerperal infection—parametritis or thrombo-phlebitis—after discharge, but the risk is very slight. We have had little experience sending such women home in an ambulance three or four days after delivery but are inclined to doubt that serious consequences will develop more than rarely. The one obvious disadvantage of early dismissal affects those women who prefer to suckle their children. Even after a week it may be impossible to determine whether the milk supply will be adequate, and one is confronted with the choice of sending them home in hopes that things will work out satisfactorily or of detaining them for a few days.

The average single hospital room is large enough to accommodate two beds—a fact which has in part solved our own problem. A portable screen placed between the beds affords some slight privacy but most women prefer to eliminate it. There are certain advantages to putting together two women who have delivered the same day. Obviously, the occasional seriously ill patient will require a separate room.

When objection is raised to such crowding, the woman, or more frequently her husband, is simply told that they are lucky to have any accommodations. Special nurses are a luxury that should not be tolerated except in extreme cases. Moreover, when nurses for general duty are scarce, all special nurses should be required to serve a day or two of general duty for each week they serve as "specials."

Overcrowding in nurseries appears also to be not so serious a situation as we have been led to believe, provided reasonable but not elaborate care is provided and there is available an isolation nursery for those infants with even suspicious contagious lesions.

It is in actual care during labor that modern obstetrics has become luxurious, with a resulting expenditure of professional time out of proportion to the results obtained. I refer, of course, to the widespread and amazingly successful efforts to make childbirth "painless" through heavy drugging with one preparation or another. These various techniques have one thing in common—they demand the close supervision of trained professional personnel if the safety of mother and child is to be assured. The question can naturally be raised as to whether the time will not soon come when we must decide whether our nursing and

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medical skills can be better employed in some more fundamental activity. I would not have you think that I oppose the employment of pain-relieving procedures, but rather that I propose the utilization of the less technical and probably less effective but essentially safer methods of producing incomplete but still satisfactory analgesia. I have never been convinced that the demand for painless parturition originated with our child-bearing women. As I have watched it develop since the days of "twilight sleep," it has appeared to be activated by a spirit of professional competition. If this evaluation is correct, then possibly our sins of commission are overtaking us and may make for less competitive and more reasonable analgesia. There is no good reason to believe that incomplete analgesia or amnesia will not be acceptable to most women as a wartime sacrifice, and it will help to relieve the professional burden. Tollefson in a recent analysis of obstetric nursing activities at the California Hospital in Los Angeles found that each delivery required sixteen hours of nursing time, and that four and one-half hours, or 28 per cent of that time, was spent "watching patients under analgesia."

With the increasing scarcity of trained anesthetists, our ideas on obstetric anesthesia may need revision to the point where the nurse or the physician himself will function unassisted. Drop anesthesia with chloroform, ether, or the newer vinethene can be entrusted to the nurse under supervision of the operator in spontaneous deliveries and in the simpler operative procedures, as was the custom a generation ago. Perineal block and caudal anesthesia can be carried out by the physician alone with a high percentage of satisfactory relief. Such changes are not what we desire, but would appear safer than turning a tyro loose with the complicated machines employed in administering the preferred anesthetic gases. Over approximately the past two years, we have used chloroform and vinethene in many uncomplicated deliveries with no serious sequelæ.

Many simplifications of postpartum care have been developed to reduce the time demands on the nurses, and can be recommended. The routine employment of abdominal and breast binders can be abandoned, and their use restricted to those presenting some indication such as lax abdominal wall or heavy pendulous breasts. The common practice of keeping an ice-cap on the lower abdomen for the first twenty-four hours to promote uterine contractions and reduce afterpains can

scarcely be defended; its elimination saves valuable time and appears not to increase the patient's discomfort. The routine administration of ergot preparations for the same purposes is probably useless.

Care of the perineum with old-fashioned pitcher douches of some antiseptic solution every so many hours and after urination and defecation is a needless gesture. Equally satisfactory results can be obtained by cleansing the area with soap, water, and wash cloth from one to three times daily depending upon the amount of the lochia. After the first two or three days the operation can be safely entrusted to the patient, who can be relied upon to treat any stitches more gently than even the most experienced nurse. The use of absorbent pads under the buttocks in place of the venerable vulval pads saves some expense and is more consistent with proper treatment of a wound since there is nothing to become entangled in, and to pull upon, the suture ends.

The normal puerpera should not be treated as an ill individual, but rather as one who is resting from a strenuous physiologic experience—labor—and is probably launching upon another longer experiment—suckling her child. The final objective of puerperal care should then be to get her in good physical condition as soon as possible. She should be encouraged to move around in bed, to feed herself, and, after the first day or two, to bathe herself. If the child is bottle-fed, the mother should carry out the feedings, except possibly that in the middle of the night. She needs the experience rather than the nurse. Regular diet can be given beginning at the next mealtime following delivery. The nutritionist appreciates the elimination of liquid and soft diets from the routine care.

The breast tray represents a most unconscionable waste of time, and yet many hospitals still adhere to the belief that it maintains some miraculous protection for the nursing mother. A few moments' application of boric acid solution is held to transform a hazardous experience into one which is safe and enjoyable. Long experience has shown that there is no increase of fissures or of mastitis when the nipples are treated with kindly neglect and are permitted to function naturally. Definite lesions must obviously be treated but it is my belief that little can be done to prevent their development; certainly the breast tray is ineffective.

Tollefson found that each baby in the nursery

## WARTIME OBSTETRICS—PLASS

requires slightly more than two hours of nursing attention daily, or, to put it differently, that a nurse's day of eight hours provides twenty-four-hour care for only four babies. Diapering, feeding, and bathing consume approximately 50 per cent of the total time. Clearly nothing can be done to reduce the first, but the two latter procedures may be made less time-consuming. Breast feeding eliminates many operations such as formula making, bottle and nipple care, and milk warming, and should be encouraged. If bottle feeding is necessary, the mother should carry the feeding burden. Bathing with an antiseptic oil is less time-consuming than soap and water baths, and probably better for the baby. Routine irrigations of the eyes and swabbings of the mouth with boric acid solution serve no useful purpose, and may actually increase the incidence of nonspecific conjunctivitis and of thrush, besides wasting valuable time. Taking of rectal temperature once daily, except possibly during the first twenty-four hours is probably sufficient unless the baby is not doing well. Weighing before and after nursings on either the fifth or sixth day, together with the regular morning weight at the time of the bath, should indicate the nutritional status of the child and the sufficiency of the mammary gland output.

It has been our experience that much of the elaborate nursery routines designed to reduce infections among the new-born is unnecessary provided that means are available for maintaining a relative humidity of approximately 50 per cent. During the summer months nature usually provides such atmospheric conditions, but in the colder portions of the year special devices must be installed to increase the humidity. Under conditions of controlled humidity we have eliminated face masks even in the premature room, without any noticeable increase in respiratory disease. All persons with respiratory infections are, of course, excluded from the nursery. The nurses are not required to wear gowns. Simple hand washing is required between babies, but frequently even this is overlooked. Such simplification offends our meticulous confreres, but avoids a very considerable expenditure of time and effort.

Undoubtedly, there are other ways of conserving the time of trained personnel, which will become evident when any hospital staff analyzes its routines. Especially in open hospitals without a functioning obstetric staff, too much attention may be given to the foibles of the various visiting

physicians, with the result that there are many individual routines and confusing pet techniques to complicate nursing care. Frank and open discussion will usually permit development of a middle-of-the-road routine, that can be adopted as standard for all. Another useful proposal involves the training of lay women to act as "ward secretaries" to do the charting, to answer telephone calls and run errands, to make out the many lists of patients demanded by most hospital administrators, to complete birth certificates, and to handle other clerical tasks traditionally within the nurses' realm. The use of Red Cross Nurses' Aides for giving baths, making beds, and doing other simple professional tasks is widely accepted and can well be expanded.

The entrance of the federal government into the field of obstetric care has raised certain problems of interest to us all. That involving the direct payment of the physician by the State Health Department appears to me to be of minor significance, although I understand that your Society has opposed it as representing a wedge that may lead to the more general employment of physicians by the government. Actually, what difference does it make whether the beautiful young wife or the rich old uncle pays your delivery fee, when the rich old uncle alone has the cash with which to pay you? The wife might squander the money on something else and leave you unremunerated, but the old uncle always pays, albeit at the expense of the writer's cramp you develop from filling out forms.

To me, it is far more important that the rate of payment has been set so low, and that congressional amendment to the original bill has completely erased all the standards for giving obstetric care that had been developed so carefully over the years by the Children's Bureau. The first probably offends chiefly the obstetrician who has grown hoarse contending that a well-conducted and successful delivery should be able to compete financially with a fifteen-minute appendectomy. In any event, there is good evidence that the twenty-five dollar delivery and the thirty-five dollar complete obstetric care fees are popular with the profession. I am told that in one midwest city near a large army camp the physicians had refused to care for army wives. The station hospital, with two or three certificated obstetricians on the staff, completed arrangements for giving obstetric service to these women just as the federal appropriation became available. The

## FINGER BANDAGE—POOL

local medical men then decided that they could easily handle the additional clinical load and demanded, successfully, that the post facilities be not used. In other words, money talks, and sure money, even thirty-five dollars, is far from being a whisper.

The amendment, which apparently authorizes payment of the standard fees to osteopaths and chiropractors, and even to midwives in certain states, has all the earmarks of legislation which was viewed only from the political angle. Obviously, it puts at the same level all individuals who are licensed by the state to attend parturient women. What effect this will have upon maternal and infant mortality rates can only be conjectured, but a reduction can scarcely be anticipated.

Clearly, "wartime obstetrics," with its professional, financial, and political facets deserves more time than I have been allotted, but I trust that I have stimulated thought without arousing any personal antagonism. The primary obstetric responsibility of those of us who are fortunate or unfortunate enough not to be with the armed forces should be (1) to simplify our obstetric routines by elimination of nonessentials in order to make the available trained personnel adequate to protect the life and health of our mothers and their children, and (2) to direct the seemingly inevitable encroachment of government into obstetric practice so that the least possible harm will be done, making the welfare of the patient the criterion by which all innovations are judged.

## An Interlocking Finger Bandage Which Needs No Anchor

By H. H. Pool, M.D.  
Pontiac, Michigan

B.A., Ohio Wesleyan University, 1909; M.D., Western Reserve University, 1918; Postgraduate University Michigan 1925-27; Diplomate American Board of Radiology, 1937; Member American College of Radiology, 1940.

- IN my childhood we usually figured that a finger bandage would probably stay on about an hour, if we were careful. I found the same

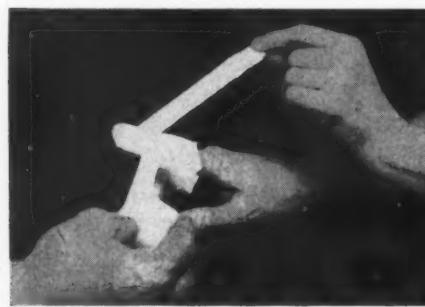


Fig. 1. The first round of the bandage is applied above the free end.

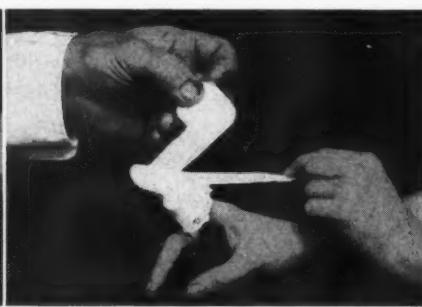


Fig. 2. The second round of the bandage is applied on top of the free end.



Fig. 3. The free ends are tied in a square knot.

difficulty later in medical practice unless adhesive was used or the bandage was anchored to the wrist. I then tried an adaptation which I found almost universally satisfactory; this bandage cannot unwind and on the average finger it is almost impossible to remove it without untying. It is particularly useful to persons who are actively using the hand.

The bandage is applied in this manner: After the dressing is in place I usually cover the end

of the dressing with a piece of 3-inch bandage which would reach well up on the finger. This gives a smooth end so that overlapping is not necessary. The free end of the bandage is left some 6 inches long. This is held by the patient or the physician with the first round of the bandage passing just above it. It is then lowered parallel to the finger and the second round passed over it. It is continued in this manner with successive rounds applied above and below until the base of the finger is reached. At this point the final two rounds are on top of the free end. The bandage is then cut loose with the two ends tied

in a square knot. This will give a snug fitting bandage with a minimum amount of material, with no adhesive used and no anchor to the wrist required.

The only precaution is not to tie the knot too tightly. Usually the patient will inform you when the bandage is tight enough. It must be applied with care if there is marked swelling, but after a few trials one will soon become accustomed to applying it with the proper tension.

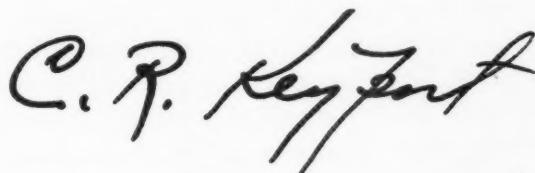
## Keep the Home Fires Burning

As we present the annual roster of the MICHIGAN STATE MEDICAL SOCIETY, it is significant to notice that to date 2,175 of our membership are in the armed forces of our country. This is a lion's share of Michigan doctors. It means that these doctors are making an extreme sacrifice. To give up homes and family, a practice which in many cases has taken years to build, and accept in the face of all this a decided reduction in income is truly a sacrifice. Still as Americans, these same doctors of medicine realize that all these sacrifices and hardships which they are encountering, to say nothing of the dangers to life and future health, are necessary to the safe future of our country and to provide the continuance of life, liberty and the pursuit of happiness for all of us.

Are we on the home front making sacrifices comparable to our fellow doctors in service? It is true we are working harder than ever to care for the citizens of our state and to continue to uphold the highest standards of health. We are continuing to carry on the programs of extramural and intramural courses in coöperation with the U. of M. and Wayne University. We are trying to keep the home fires burning in our county societies and our State Society so that when this world conflict is over and the 2,175 military members of our Society return home, we can greet them through their own county societies and extend a glorious welcome through their State Society.

We at home should pledge ourselves to see that every eligible doctor in the jurisdiction of our own county medical society becomes a member of the county society and the State Society.

Never before has that old saying, "In unity there is strength," been more necessary than now, if we are to defeat regimentation and preserve the practice of medicine for our doctors at war, as it was, or even better than it was, before they entered military service.



President, Michigan State Medical Society.



*President's*



*Page*





## EDITORIAL



### WE NEED A BOOK

■ Not long ago one of our leading physicians asked the editor for references to a book that would give the status of the problem of socialized medicine, the arguments for and against regimentation and state medicine, and what can be done about it. He wished to study the subject in all its aspects, from both sides, and then to be able to formulate some conclusions for himself. Later the director of one of our industrial high schools asked for a list of information that could be set out for students who wish to work on this subject in their debates and other studies. Very recently the wife of one of our members who is serving as a Captain in the Army overseas, wrote to the Lansing office asking what, if anything, the medical profession is doing to counter the urge for regimentation. She said her husband had asked that she keep in touch and keep him informed. She was of the opinion that nothing is being done.

A few days ago the president of a great University, in an address to one of the Alumni groups, is reported to have said that the medical profession is the one great body that is doing nothing looking toward the betterment of services and conditions after the war; that "they are contributing nothing constructive, and are opposing all constructive proposals."

For years the schools have been conducting debates on the subject of better distribution of medical care, the regimentation of medicine, and state control. They have reference libraries giving the social side, the side of the dreamers, the side favoring government regimentation, but the picture from the standpoint of the medical profession and the private practitioner of medicine is lacking. Occasionally a few paragraphs, or a small pamphlet, dealing with some phase of the subject makes its appearance, but nothing eminently satisfactory.

The director of the high school has a just and logical question and should be aided in his quest for more and better information. The doctor has had this material confronting him in his every day life, in his contacts with government bureaus

in the care of public charge cases, and in the medical journals. The doctor's wife is groping in the dark, not knowing where to find her material, and being disappointed.

But there is no excuse for the president of a great University, conducting one of the outstanding medical schools of the country, to be so woefully uninformed. The Michigan State Medical Society several years ago employed a university professor of economics to make a \$20,000 study on this subject, searching for this very answer. Within the past five years it has invested another \$17,000 to develop and establish a form of prepayment medical care. Michigan Medical Service is the most outstanding of many voluntary prepayment plans established and in operation throughout the United States.

The Michigan State Medical Society, in conjunction with the Michigan Department of Health, the Wayne University Medical School, and the University of Michigan Medical School, has made one of the most progressive and far-reaching experiments in bringing postgraduate medical studies to the private practitioner of medicine. In no place in the world has postgraduate medical study even matched what has been done in Michigan. Postgraduate medical study is certainly one of the necessary things needed to bring to the people the very best in medical care. The Michigan State Medical Society has also established a Foundation for the advancement of postgraduate medical study. This has all been accomplished by voluntary, not compulsory effort.

Plans for the postwar world of medicine, plans for the mental rehabilitation of our doctors in military service, plans for the preservation for our people of the individual and voluntary administration of medicine, the plan which is fundamentally and wholly American, have occupied the time and effort of our administrative bodies at and between every meeting for years. Many of us have advocated more intensive contacts with the public in the way of keeping them informed concerning what American medicine is, what it has done for the health and well-being of the country, and what the future may look for under

## EDITORIAL

private enterprise, as well as under regimentation.

### We need a book.

Someone must write a book to place this information in the reach of high school children who are asking for authentic knowledge. That book should tell what the practice of medicine is, the problems of education, the problems of distribution, the problems of research, the problems of coöperation, of consultation, of giving our people not just good medicine, but the very best that is known. That book would also be a good place to paint the picture of regimentation, of bureaucracy, of cultism.

### Someone *must* write a book.

And that book should be placed gratis in every public library in the state, in every high school and college reading room in the state, in the hands of every teacher of social problems in the state, in the hands of the directing head of every educational institution in the state, and lastly in the hands of every doctor of medicine in the state.

### Who will write this book?

How soon?

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### THE MICHIGAN HEALTH COUNCIL

■ THE idea of forming a Michigan Health Council was advanced at a meeting on July 16 and 17, 1943, at Mackinac Island. This meeting was attended by the members of the Council of the Michigan State Medical Society and representatives of the Michigan Hospital Association, the Michigan Medical Service and the Michigan Hospital Service. There was unanimity at this meeting that a need existed for an organization which could act as a clearing house of all four organizations on matters of mutual interest. The Michigan Health Council is the result, and is being incorporated as a nonprofit organization, the object being to promote the health of the people by (a) coöordinating the efforts of the four organizations and other groups interested in the health field in matters of common interest, (b) conducting a general educational program regarding the advantages to the health of the people to be gained through the private practice of medicine and related services and the operation of voluntary nonprofit hospitals, (c) taking all necessary and practical steps to arrange for the availability of medical, hospital and related services.

One of the first activities will be a survey of

public opinion in Michigan to obtain the attitude of the public toward the medical profession, and hospitals, the cost of medical and hospital care, the attitude of the public regarding prepayment health plans under the auspices of professional groups, government, or other agencies, and other related matters. Pending the outcome of this survey, the Michigan Health Council will provide spokesmen who will address groups throughout the state, telling what is now being done by the medical profession and hospitals through private practice and the voluntary system to meet the needs of the people.

Tremendous progress has been made in medical science from the standpoint of care of the patient, research and education. In Michigan great progress has also been made from an economic standpoint through the development of the Michigan Medical Service and Michigan Hospital Service. More than one out of five persons in Michigan are now eligible for hospital service through the hospital plan, and more than one out of every nine persons are protected against the costs of surgical, obstetrical, anesthesia and x-ray services through the medical plan.

The medical profession and the hospitals, however, have been lax in keeping the public informed as to what is being done, and what is planned to be done to meet the needs of the people through private medical practice and the voluntary hospital system.

The Michigan Health Council will be an active force in the future for all our public contacts.

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### WAGNER-MURRAY-DINGELL BILL

■ THERE is increasing concern among public welfare administrators that the organized opposition to the controversial issues of compulsory health insurance and federalization of unemployment compensation may delay or kill consideration of the comparatively noncontroversial provisions for a unified public assistance program. A proposal has been made to explore the possibilities of a separate bill to incorporate the comparatively noncontroversial provisions of the Wagner-Murray-Dingell Bill under the assistance title. Medical economists have believed all along that there were parts of that bill which were of value and could be salvaged. This may point the way to a better understanding.

# Michigan State Medical Society

## Roster 1944

[An "M" following a name indicates active military service; "E" indicates Emeritus Members; "R" indicates Retired Members; all others are Active Members]

### Allegan County

Beckett, M. B.	M
Brown, Lewis Freeman	M
Brunson, Eugene T.	Ganges
Burdick, G. J.	Fennville
Dickinson, C. A.	Wayland
Dolfin, W. E.	M
Flinn, C. C.	Allegan

Hudnutt, Orinn Dean	Plainwell
Johnson, E. B.	Allegan
Johnson, H. H.	Martin
Mahan, James E.	Allegan
Medill, W. C.	Plainwell
Ramsayer, Gladwin E.	Plainwell

Rigterink, George H.	Hamilton
Stuch, Howard T.	Allegan
Stuch, Olin H.	Otsego
TenPas, Henry W.	Hamilton
Van Ness, J. H.	Allegan
Vaughn, W. R.	Plainwell
Van Der Kolb, Bert	Hopkins

### Alpena-Alcona-Presque Isle Counties

Ahland, J. K.	Hastings
Bunting, John W.	Alpena
Burkholder, H. J.	Alpena
Carpenter, Clarence A.	Onaway
Constantine, Aeneas	Harrisville
Foley, E. L.	Alpena
Hier, Edward A.	Alpena

Kessler, Harold	M
Lightner, C. M.	Vallejo, Calif.
Nesbitt, Wm. E.	M
Newton, Wm. B.	Alpena
Ramsey, J. A.	M
O'Donnell, F. J.	Alpena

Parmenter, E. S.	Alpena
Purdy, John W.	Lachine
Rutledge, S. H.	M
Slade, H. G.	Rogers City
Trudeau, J. M.	M
Wienczewski, Theophile	M

### Barry County

Clarke, Daniel M.	Hastings
Finnie, R. G.	M
Fisher, Gordon F.	M
Gwinn, A. B.	Hastings

Harkness, Robt. B.	Hastings
Keller, Guy C.	Hastings
Lathrop, Clarence P.	Hastings
Lofdahl, Stewart	Nashville

Lund, Chester A. E.	Middleville
McIntyre, K. S.	M
Morris, Edgar T.	Nashville
Wedel, Herbert S.	Hastings

### Bay-Arenac-Gladwin-Iosco Counties

Alcorn, Kent	Bay City
Allen, A. D.	Bay City
Asline, J. N.	M
Austin, Justis	Tawas City
Baker, Chas. H. (E)	Bay City
Ballard, Sylvester L.	Bay City
Ballard, W. R.	Bay City
Boulton, Arthur O. (E)	Gladwin
Brown, G. M.	Bay City
Connelly, C. J.	M
Criswell, R. H.	Bay City
Dardas, M. J.	M
DeWaele, Paul L.	M
Drummond, Fred	Kawkawlin
Dumond, V. H.	Bay City
Foster, L. F.	Bay City
Freel, John A.	Bay City
Gamble, W. G., Jr.	Bay City
Gronemeyer, W. H.	M
Groomes, Charles	Bay City
Grosjean, J. C.	Bay City
Gunn, Robert	Detroit
Hall, R. F.	M
Hagelshaw, G. L.	M
Hasty, Earl	Whittemore
Hess, C. L.	Bay City
Heuser, Harold H.	Bay City

Horowitz, S. Franklin	M
Huckins, E. S.	Bay City
Hughes, E. C.	Bay City
Husted, F. Pitkin	M
Jacoby, A. H.	M
Jens, Otto	Essexville
Jones, Jerry M.	Bay City
Keho, John	Bay City
Kerr, Wm.	Bay City
Kessler, Mana	Bay City
Kessler, S.	Bay City
Knobloch, Howard	M
Lane, Milton	M
Lerner, David	M
McDonnell, Walter R.	M
McEwan, J. H.	Bay City
MacPhail, Joseph	M
Medvesky, M. J.	M
Miller, Edwin C.	M
Mitton, Orland W.	East Tawas
Moore, George W.	Bay City
Moore, Neal R.	M
Mosier, D. J.	M
Pearson, Stanley M.	M
Perkins, Roy C.	Bay City
Ruetter, C. W.	M
Riley, R. B.	M

Scrafford, Royston Earl	Bay City
Shafer, H. C.	M
Sherman, R. N.	Bay City
Siler, Delbert	Bay City
Slattery, M. R.	Bay City
Smith, William Marshall	Bay City
Staley, Hugh	B
Stewart, G. C.	c/o Allen Clinic, Bay City
Stinson, W. S.	Bay City
Stuart, Alexander A.	Bay City
Stuart, Kenneth	Bay City
Swantek, Charles M. (R)	Bay City
Switzer, W. W.	c/o Chevrolet Motor Co., Bay City
Tarter, Clyde S.	M
Timreck, Harold A.	M
Tupper, V. L.	Bay City
Urmston, Paul R.	Bay City
Warren, E. C.	Bay City
Wilcox, J. W.	Bay City
Wilson, Thomas G.	Bay City
Wittwer, E. A.	Bay City
Wood, Neal	City Hall, Bay City
Woodburne, H. L.	M
Zaremba, Aloysius J.	Bay City
Ziliak, A. L.	Bay City

### Berrien County

Allen, Robt. Clarke	St. Joseph
Anderson, Bertha	St. Joseph
Bartlett, W. M.	M
Belsley, Frank K.	Benton Harbor
Brown, F. W.	Watervliet
Brown, G. W.	Buchanan
Brown, Rolland J.	M
Burrell, H. J.	Benton Harbor
Cawthorne, H. J.	Benton Harbor
Conybeare, R. C.	Benton Harbor
Crowell, Richard	M
Dunnington, R. N.	Benton Harbor
Eidson, D.	Berrien Springs
Ellet, W. C.	M
Faber, Michael	Benton Harbor

Fredrickson, H. C.	Buchanan
Friedman, M. E.	New Buffalo
Gillette, Clarence H.	Niles
Hanna, P. G.	St. Joseph
Harper, Ina	Benton Harbor
Harrison, L. L.	Niles
Hart, Russell T.	Niles
Henderson, Fred	Niles
Henderson, Robert	Niles
Herring, N. A.	Niles
Hershey, Noel J.	M
Huff, H. D.	Niles
King, Frank, Jr.	M
Kling, H. C.	Niles
Leva, John B.	M
McDermott, J. J.	St. Joseph

Merritt, Charles W.	St. Joseph
Miller, E. A.	Berrien Springs
Mitchell, Carl A.	Benton Harbor
Moore, T. Scott	Niles
Ozerman, Chas. J.	Benton Harbor
Reagan, Robt.	M
Rein, Gerald	Benton Harbor
Richmond, D. M.	St. Joseph
Rosenberry, A. A.	Benton Harbor
Ruth, J. G.	M
Smith, W. A.	Berrien Springs
Sowers, Bouton	M
Strayer, J. C.	M
Thorup, Don W.	Benton Harbor
Westervelt, H. O.	Benton Harbor
Yeomans, T. G.	St. Joseph

## ROSTER MSMS

### Branch County

Andrews, Frank A.	Coldwater
Bailey, J. E.	Coldwater
Beck, Perry C.	Bronston
Brunson, A. E.	Colon
Bien, W. J.	Coldwater
Chipman, E. M.	M
Culver, Bert W.	Coldwater
Far, S. E.	Quincy

Fraser, R. J.	M
Joerin, Wm. A.	M
McLain, R. W.	Jackson
Meier, H. J.	M
Mooi, H. R.	Union City
Olmstead, Kenneth L.	M
Phillips, F. L.	Bronson

Rees, K. B.	Coldwater
Schultz, Samuel	Coldwater
Scovill, H. A.	M
Smith, L. Lloyd	M
Thomas, J. A.	Coldwater
Wade, R. L.	Coldwater
Walton, N. J.	Quincy
Weidner, H. R.	M

### Calhoun County

Amos, Norman H.	M
Baribeau, R. H.	Battle Creek
Barnhart, Samuel H.	Battle Creek
Becker, H. F.	M
Beuker, Herman	Marshall
Bonifer, Phillip	M
Braham, Wilbur	M
Brainard, C. W.	M
Campbell, Alice	Albion
Campbell, R. J.	M
Capron, Manley J.	M
Church, Starr K.	(E) Marshall
Chynoweth, W. R.	M
Cooper, J. E.	Battle Creek
Curless, Grant R.	M
Curry, Robt. K.	M
Dickson, A. R.	Battle Creek
Dodge, Warren M., Jr.	M
Fairbanks, Stephen	Albion
Finch, D. L.	Battle Creek
Forsyth, J. F.	M
Frank, David L.	M
Fraser, R. H.	Battle Creek
Funk, L. D.	Athens
Gething, Joseph W.	Battle Creek
Giddings, A.	Battle Creek
Gilfillan, Margery J.	Battle Creek
Graubner, F. L.	M
Hafford, A. T.	Albion
Hale, C. E.	M
Hansen, E. L.	Battle Creek
Hansen, Harvey C.	M
Harris, R. H.	Battle Creek
Haughey, Wilfrid	Battle Creek
Heald, C. W.	Battle Creek

Henderson, Louis N.	Albion
Henderson, Philip M.	Albion
Herzer, Henry A.	Albion
Hills, C. R.	Battle Creek
Holes, Jesse J.	Battle Creek
Holtom, B. G.	Battle Creek
Howard, W. L.	Battle Creek
Hoyt, Aura A.	Battle Creek
Hubly, James W.	M
Humphrey, Arthur A.	M
Humphrey, A. Edward	Marshall
Jesperson, Lydia	Battle Creek
Jones, T. K.	M
Keagle, Leland R.	M
Keeler, K. B.	Albion
Kingsley, Paul C.	M
Kinde, M. R.	M
Kolvoord, Theodore	Battle Creek
LaPorte, L. A.	Battle Creek
Levy, Joseph	M
Lewis, W. B.	Battle Creek
Lowe, H. M.	Battle Creek
Lowe, Kenneth	M
Lowe, Stanley T.	M
MacGregor, Archibald E.	Battle Creek
Manni, Lawrence C.	Battle Creek
McNair, L. N.	Albion
Meister, F. O.	M
Melges, F. J.	Battle Creek
Mercer, C. M.	Battle Creek
Morrison, Donald B.	M
Mullenmeister, H. F.	M
Mustard, Russell	Battle Creek
Norman, Estelle G.	Battle Creek

Norton, Richard C.	M
Patterson, Adonis	M
Putman, W. N.	Battle Creek
Radabaugh, Clara V.	Battle Creek
Robert, John	Battle Creek
Robins, Hugh	Marshall
Rorick, Wilma Weeks	Battle Creek
Rosenfeld, J. E.	Battle Creek
Royer, C. W.	M
Schelm, George W.	Battle Creek
Selmon, Bertha L.	Battle Creek
Sharp, A. D.	Albion
Shipp, L. P.	Battle Creek
Sibilsky, A. Clark	Battle Creek
Simpson, R.	M
Slagle, George W.	M
Sleight, James D.	M
Smith, T. C.	M
Stadie, Wendell H.	M
Stiebel, Richard	Battle Creek
Tannenholz, Harold S.	Battle Creek
Taylor, Clifford B.	M
Toms, Roland E.	M
Upson, W. O.	Battle Creek
Van Camp, Elijah	Battle Creek
Verity, Lloyd E.	Battle Creek
Vollmer, Maud J. O.	Moline, Ill.
Walters, F. R.	Battle Creek
Walters, Royal W.	Battle Creek
Watson, Bernard	M
Winslow, Rollin C.	Battle Creek
Winslow, Sherwood B.	Battle Creek
Zindler, George A.	Battle Creek
Zinn, Karl	M

### Cass County

Adams, U. M.	Marcellus
Clary, R. I.	M
Hickman, John K.	M
Kelsey, Jas. H.	Cassopolis

Loupee, George	Dowagiac
Loupee, S. L.	Dowagiac
Lyman, W. R.	Dowagiac
Myers, Charles M.	Dowagiac

Pierce, Kenneth C.	Dowagiac
Rice, Franklin	M
Swengel, D. H.	Cassopolis

### Chippewa-Mackinac Counties

Birch, Wm.	M
Blair, H. M.	M
Carr, E. S.	Pickford
Conrad, George A.	Sault Ste. Marie
Cornell, Elipheta A.	M
(E)	Sault Ste. Marie
Cowan, Donald	M
Darby, J. F.	St. Ignace

Gilfillan, E. O.	Clear Lake, Iowa
Hagele, Marie A.	Sault Ste. Marie
Hakala, L. J.	M
Harrington, H. M.	Sault Ste. Marie
McBryde, Lyman M.	Sault Ste. Marie
MacDonald, A.	Mackinaw Island
Mertaugh, W. F.	M
Maloney, F. J.	Sault Ste. Marie

Montgomery, B. T.	Sault Ste. Marie
Rhind, E. S.	Sault Ste. Marie
Vegors, Stanley H.	Sault Ste. Marie
Wallen, LeRoy J.	M
Webster, E. H.	Sault Ste. Marie
Willison, C.	Sault Ste. Marie
Wood, Neal N.	Charlevoix
Yale, I. V.	Sault Ste. Marie

Bennett, George W.	Elsie
Cook, Bruno	Westphalia
Elliott, Bruce R.	Ovid
Foo, Chas. T.	St. Johns

Frace, Guy E.	St. Johns
Hart, Dean W.	M
Henthorn, A. C.	St. Johns
Ho, Thomas Y.	St. Johns
Luton, F. E.	St. Johns

McWilliams, W. B.	Maple Rapids
Russell, Sherwood	M
Stoller, Paul F.	Fowler
Wahl, George Edward	M

Benson, G. W.	Escanaba
Boyce, D. H.	Escanaba
Brenner, Ervin J.	M
Carlton, A. J.	Escanaba
Chenowith, Nancy R.	Escanaba
Clausen, Claire H.	M
Diamond, J. A.	Gladstone

Frenn, Nathan J.	Bark River
Fylie, James	M
Groos, Harold Q.	Escanaba
Groos, Louis P.	Escanaba
Kitchen, A. S.	Escanaba
Lemire, Wm. A.	M
Lindquist, N. L.	Manistique
Long, Harry W.	Escanaba

McInerney, Edna C.	Escanaba
McInerney, Thomas A.	M
Miller, Albert H.	Gladstone
Mitchell, James D.	Gladstone
Moll, C. W.	Escanaba
Shaw, George A.	Manistique
Walch, J. J.	Escanaba

\*Died in Military Service

## ROSTER MSMS

### Dickinson-Iron Counties

Addison, E. R.....Crystal Falls  
 Alexander, W. H.....Iron Mountain  
 Andersen, E. B.....Iron Mountain  
 Boyce, Geo. H.....Iron Mountain  
 Browning, James L.....M  
 DeSalvo, F.....Niagara, Wis.  
 Fielding, Wm.....Norway

Fredrickson, Geron.....Iron Mountain  
 Gloss, Kenneth E.....M  
 Haight, H. H.....M  
 Hayes, R. E.....Sagola  
 Huron, W. H.....Iron Mountain  
 Irvine, L. E.....Iron River

Kofmehl, Wm. J.....Stambaugh  
 McEachran, Hugh D.....M  
 Menzies, Clifford.....Iron Mountain  
 Retallack, R. C.....N. Uvalde, Texas  
 Smith, Donald R.....Iron Mountain  
 White, Robert E.....Stambaugh  
 Witkow, Alexander.....Iron Mountain

### Eaton County

Arner, Fred L.....Bellevue  
 Brown, B. P.....M  
 Burdick, Austin F.....Grand Lake  
 Carothers, Daniel J.....M  
 Clements, F. W.....Eaton Rapids  
 Engle, Paul.....Olivet  
 Goff, S. B.....M  
 Hannah, H. W.....Charlotte

Hargrave, Don V.....Eaton Rapids  
 Huber, Chas. D.....Charlotte  
 Huyke, Stanhope Pier.....M  
 Imthum, Edgar F.....M  
 McLaughlin, C. L. D.....Vermontville  
 Myers, Albert W.....Potterville  
 Paine, E. Madison, Jr.....M

Quick, Phil H.....Olivet  
 Rickerd, Vinton J.....Charlotte  
 Sackett, C. S. (R).....Charlotte  
 Sassaman, F. W.....Charlotte  
 Sevener, C. J.....Charlotte  
 Sevener, Lester G.....Charlotte  
 Stucky, George.....Charlotte  
 Van Ark, Bert.....M

### Genesee County

Adams, Chester.....M  
 Andrews, N. A.....M  
 Anthony, George E.....M  
 Backus, Glenn R.....M  
 Baird, James.....Flint  
 Bald, Frederick W.....M  
 Barbour, Fleming A.....M  
 Baske, Franklin W.....Flint  
 Bateman, L. G. ....M  
 Benson, J. G.....Flint  
 Bernstein, Eli N.....M  
 Biggar, H. R.....Flint  
 Bishop, D. L.....Flint  
 Blakeley, A. C.....Flint  
 Bogart, Leon M.....Flint  
 Boles, Wm. P.....Flint  
 Bonathan, A. T.....Flint  
 Bradley, Robt.....M  
 Brain, R. Gordon.....Flint  
 Branch, Hira E.....M  
 Brasie, D. R.....Flint  
 Briggs, Guy D.....Flint  
 Bruce, Wm. W.....M  
 Buchanan, W. Fremont.....M  
 Burkett, L. V.....Flint  
 Burnell, Max.....Flint  
 Burnside, Howard B.....M  
 Chaffee, Elsa.....Flint  
 Chambers, Myrton S.....Flint  
 Chandler, M. E.....Flint  
 Charters, John H.....Flint  
 Childs, Lloyd H.....Flint  
 Clark, Clifford P.....Flint  
 Colwell, C. W.....M  
 Connell, J. T.....Flint  
 Conover, G. V.....M  
 Conover, T. S.....Flint  
 Cook, Henry.....Flint  
 Covert, F. L.....Gaines  
 Credille, B. A.....Flint  
 Curry, George.....Flint  
 Curtin, J. H.....Flint  
 Del Zingro, N.....Davison  
 Dimond, E. G.....Flint  
 Dodds, F. E.....Flint  
 Drewyer, Glen.....M  
 Edgerton, A. C.....Clio  
 Eichhorn, Ernest.....Flint  
 Eickhorst, Thomas N.....M  
 Elliott, H. B.....Flint  
 Ettinger, Ralph D.....Clio  
 Farhat, M. M.....M  
 Finkelstein, T.....M  
 Flynn, S. T.....M  
 Foley, S. I.....Flint  
 Fuller, Hugh T.....M  
 Gelenger, S. M.....M  
 Gleason, N. A.....Flint  
 Goering, George R.....Flint  
 Golden, Evelyn Cohen.....Flint  
 Golden, H. Maxwell.....Flint

Goodfellow, B. J.....Flint  
 Gorne, S. S.....M  
 Gray, Edwin F.....M  
 Grover, H. F.....Flint  
 Guile, Earle.....Flint  
 Guile, G. S.....Flint  
 Gundry, G. L.....Grand Blanc  
 Gutow, J. J.....M  
 Hague, R. F.....M  
 Halligan, Raymond S.....Flint  
 Hamady, Ruth.....Flint  
 Handy, John W.....(E) Flint  
 Harper, A. W.....Flint  
 Harper, Homer.....Flint  
 Harrison, Leo D.....Flint  
 Hawkins, James E.....Flint  
 Haymond, Josseph L.....Flint  
 Hays, George A.....M  
 Hiscock, H. H.....M  
 Houston, James.....Swartz Creek  
 Hubbard, Wm. B.....Flint  
 Huffton, Wilfred L.....Flint  
 Jefferson, Harry.....Flint  
 Johnson, Arthur H.....Flint  
 Johnson, Frank D.....M  
 Jones, Lafon.....Flint  
 Kaleta, Edward.....M  
 Kaufman, Lewis D.....M  
 Kirk, A. Dale.....Flint  
 Knapp, M. S. (R).....Fenton  
 Kretchmar, A. H.....Flint  
 Kurtz, J. J.....Flint  
 Lambert, L. A.....M  
 Lavin, Kathryn R.....Flint  
 Leach, J. L.....Flint  
 Livesay, Jackson E.....Flint  
 Logan, G. W.....Flushing  
 MacDuff, R. B.....Flint  
 MacGregor, D. M.....Flint  
 MacGregor, R. W.....Flint  
 Macksood, Joseph.....Flint  
 Marsh, H.....Flint  
 Marshall, Wm. H.....Flint  
 Mason, Elta.....Flint  
 Mathewson, Guy C.....Flint  
 McArthur, A.....Flint  
 McArthur, R. H.....M  
 McGarry, R. A.....Flint  
 Miller, Bryce.....Flushing  
 Miller, Edwin E.....Flint  
 Miller, Loren E.....M  
 Miltick, Anthony J.....Flint  
 Miner, Frederick B.....Flint  
 Moore, J. W.....Flint  
 Moore, Kenneth B.....Flint  
 Morrish, Ray S.....Flint  
 Morrissey, V. H.....Flint  
 Mosier, Edward C.....Otisville  
 Odle, Ira.....Flint  
 Olson, James.....Flint  
 O'Neil, C. H. (R).....Deckerville

Orr, J. Walter.....Flint  
 Patterson, A. A.....Flint  
 Phillips, R. L.....Mt. Morris  
 Pfeifer, A. C.....Flint  
 Pratz, O. C.....Flint  
 Preston, Otto.....Flint  
 Probert, C. C.....Flint  
 Randell, H. E.....Flint  
 Reeder, Frank E.....Flint  
 Reichard, Orill.....Flint  
 Reid, Wells C.....Goodrich  
 Richeson, V. .....M  
 Rieth, George F.....Flint  
 Reynold, A. J.....Flint  
 Roberts, Floyd A.....Flint  
 Rowley, James A.....Flint  
 Rummell, Robert J.....Grand Ledge  
 Rundles, Walter Z.....M  
 Ryneorson, W. J.....Fenton  
 Sandy, K. R.....M  
 Scavarda, Charles J.....M  
 Schiff, B. A.....M  
 Scott, R. D.....Flint  
 Shantz, L. O.....Flint  
 Sleeman, Blythe R.....Linden  
 Sheeran, Daniel H.....Flint  
 Shipman, Charles W.....Flint  
 Smith, D. C.....Flint  
 Smith, E. C.....Flint  
 Smith, Maurice J.....M  
 Sniderman, Ben.....M  
 Snyder, Charles E.....M  
 Sorkin, Morris L.....M  
 Sorkin, S. S.....M  
 Steinman, F. H.....M  
 Stevenson, W. W.....Flint  
 Streat, R. W.....Flint  
 Stroup, C. K.....Flint  
 Sutherland, Jas. K.....Flint  
 Sutton, M. R.....Flint  
 Thompson, Alvin.....Flint  
 Thomson, J. Oscar.....Grand Blanc  
 Tofteland, Elmer H.....M  
 Trumble, G. W.....Flint  
 Van Gorder, Geo.....M  
 Vary, Edwin P.....M  
 Walcott, C. G.....M  
 Ward, Nell.....Flint  
 Ware, Frank.....Flint  
 Wark, D. R.....Flint  
 Werness, Inga W.....Flint  
 White, Carl H.....M  
 White, Herbert.....Flint  
 Williams, W. S.....Flint  
 Willoughby, G. L.....M  
 Willoughby, L. L.....Flint  
 Wills, T. N.....Flint  
 Wilson, Wm. K.....M  
 Woughter, Harold W.....M  
 Wright, D. R.....Flint  
 Wright, G. R.....Montrose  
 Wyman, J. S.....Flint

### Gogebic County

Anderson, C. E.....Anvil  
 Gertz, M. A.....Ironwood  
 Gorilla, A. C.....Ironwood  
 Hendrickson, A. O.....Ironwood  
 Lieberthal, M. J.....Ironwood

Lieberthal, P. R.....Ironwood  
 Nezworski, H. T.....Ironwood  
 Pierpont, D. C.....Ironwood  
 \*Reid, J. D.....Ironwood  
 Reynolds, F. L. S.....Ironwood

Stevens, C. E.....Ironwood  
 Tew, W. E.....Bessemer  
 Tressel, H. A.....Wakefield  
 Urquhart, C. C.....Ironwood  
 Wacek, W. H.....Ironwood

\*Died in military service

## ROSTER MSMS

### Grand Traverse-Leelanau-Benzie Counties

Baumann, Milton C.	M	Hyslop, Wm. T.	Traverse City
Boland, Ellis J.	Suttons Bay	Jerome, Jerome T.	Traverse City
Brownson, Jay J.	Kingsley	Kitson, V. H.	Elk Rapids
Brownson, Kneale	M	Knapp, Jos. L.	M
Bushong, B. B.	Traverse City	Kyselka, H. B.	Traverse City
Covey, E. L.	Honor	Lemen, Chas. E.	M
Ellis, Claude I.	Suttons Bay	Lentz, R. J.	M
Gauntlett, J. W.	Traverse City	Lossman, R. T.	Traverse City
Goodrich, Dwight	Traverse City	Murphy, Fred E.	Traverse City
Grawn, F. A.	Traverse City	Nickels, M. M.	M
Hamilton, Earl E.	M	Osterlin, Mark	Traverse City
Huene, Nevin	M	Sheets, R. Philip	Traverse City
Huston, Russell R.	Elk Rapids	Sladek, E. F.	Traverse City
		Stone, Fordyce H.	Beulah

Aldrich, Alfred L.	Ithaca
Barstow, D. K.	M
Barstow, W. E.	St. Louis
Baskerville, C. M.	Mt. Pleasant
Becker, M. G.	Edmore
Budge, M. J.	Ithaca
Burch, L. J.	Mt. Pleasant
Burt, C. E.	Ithaca
Carney, T. J.	Alma
Dale, Edward C.	M
Davis, L. L.	M
Drake, Wilkie M.	Breckenridge
Du Bois, C. F.	Alma

Alleger, W. E.	Pittsford
Bower, Chas. T.	Hillsdale
Clobridge, C. E.	Allen
Davis, L. A.	Montgomery
Day, Luther W.	Jonesville
Douglas, E. W.	Hillsdale
Fisk, Fred B.	Jonesville
Green, B. F.	Hillsdale

Abrams, James C.	Calumet
Acoks, J. R.	M
Aldrich, A. B.	Houghton
Aldrich, Addison D.	Houghton
Aldrich, Leonard	M
Bourland, Philip D.	Calumet
Brewington, G. F.	Mohawk
Buckland, R. S.	Baraga
Burke, John	Hubbell
Coffin, Leslie E.	Painesdale
Cooper, A. C.	Hancock
Gregg, W. T. S.	Calumet

Gettle, Roy R.	Kinde
Henderson, J. Bates	Sebewaing
Herrington, Charles I.	Bad Axe
Herrington, Willet J.	Bad Axe

Albert, Wilford D.	Leslie
Andrews, F. T.	Lansing
Atkinson, Everett H.	E. Lansing
Bartolomew, Henry S. (R.)	Lansing
Bauer, Theodore I.	Lansing
Behen, Wm. C.	Lansing
Bellinger, E. G.	Lansing
Black, Chas. E.	Williamston
Black, Gertrude	Williamston
Block, N. Bernita	Juneau, Alaska
Bobczynski, W. E.	Lansing
Bradford, C. W.	Lansing
Breakey, Robt S.	Lansing
Brown, F. W.	M
Brubaker, E.	Lansing
Brucker, Karl B.	Lansing
Bruegel, O. H.	E. Lansing
Burhans, R. A.	M
Calomeni, A. D.	Lansing
Cameron, W. J.	Lansing
Carr, E. I.	Lansing
Chapman, W.	Lansing
Christian, L. G.	Lansing
Clark, Wm. E.	M
Clinton, George	M
Cook, Martin J.	M

### Gratiot-Isabella-Clare Counties

Hylmer, R. E.	Beacon Hill
Janis, A. J.	Hancock
Kadin, Maurice	M
King, Wm. T.	Ahmeek
Kirton, Joseph R. W.	Calumet
Kolb, F. E.	M
LaBine, Alfred	Houghton
Levin, Simon	Houghton
MacQueen, Donald K. (E.)	Larium
Manthei, W. A.	Lake Linden
Marshall, Frank F.	L'Anse
McClure, R. J.	Calumet
Peulne, R. E.	M

### Hillsdale County

Hamilton, A. J.	Hillsdale
Hanke, George R.	Ransom
Hughes, Henry F.	Cambria
Johnson, C. E.	M
Kinzel, R. W.	M
MacNeal, John A.	Hillsdale
Martindale, E. A.	Hillsdale

### Houghton-Baraga-Keewenaw Counties

Hilmer, R. E.	Beacon Hill
Janis, A. J.	Hancock
Kadin, Maurice	M
King, Wm. T.	Ahmeek
Kirton, Joseph R. W.	Calumet
Kolb, F. E.	M
LaBine, Alfred	Houghton
Levin, Simon	Houghton
MacQueen, Donald K. (E.)	Larium
Manthei, W. A.	Lake Linden
Marshall, Frank F.	L'Anse
McClure, R. J.	Calumet
Peulne, R. E.	M

### Huron County

Holdship, Wm. B.	Ublly
Monroe, Duncan J.	Elkton
Morden, Charles B.	Bad Axe

### Ingham County

Cook, R. J.	Lansing
Cope, H. E.	Lansing
Corneliuson, Goldie B.	Lansing
Corsaut, J. C.	Mason
Cross, Frank S.	Lansing
Darling, L. G.	Lansing
Dart, Dorothy O.	Lansing
Davenport, C. S.	Lansing
Dean, Carleton	Lansing
Delay, C. P.	Webberville
Devries, C. F.	Lansing
Dolbee, Malcolm	E. Lansing
Doyle, Charles R.	M
Doyle, C. P.	Lansing
Drolett, Donald J.	M
Drolett, Fred C.	Lansing
Drolett, Lawrence	M
Dunn, F. C.	Lansing
Dunn, F. M.	Lansing
Ellis, Bertha	Lansing
Ellis, C. W.	Lansing
Feeney, Kenneth J.	Lansing
Finch, Russell L.	Lansing
Fisher, D. W.	M
Folkers, Leonard M.	E. Lansing
Fosget, Wilbur W.	Lansing
Foust, E. H.	Lansing

Swartz, F. G.	Traverse City
Thacker, Fred R.	Frankfort
Thirlby, E. L.	Traverse City
Thompson, T. W.	Traverse City
Trautman, Frederick B.	M
Way, Lewis R.	M
Weitz, Harry	Traverse City
Wilcox, Paul H.	Traverse City
Willard, Wm. G.	Benzonia
Willoughby, Frances L.	M
Zielke, I. H.	M
Zimmerman, J. G.	Traverse City

Oldham, E. S.	M
Poppen, C. J.	Reading
Putzig, Louis M.	Blanchard
Rondot, E. F.	Lake
Rottshafer, J. L.	M
Sharon, J. P.	Mt. Pleasant
Silvert, P. P.	Vestaburg
Slattery, F. G.	M
Strange, Russell H.	Mt. Pleasant
Waggoner, R. L.	St. Louis
Wilcox, R. A.	Alma
Wilson, Earl C.	Harrison
Wolfe, Kenneth P.	Alma
Wood, Cornelius B.	M

Mattson, H. F.	M
McFarland, O. G.	North Adams
Miller, Harry C.	San Diego, Calif.
Moench, G. F.	Hillsdale
Sandor, A. A.	M
Sawyer, Walter W.	M
Sterling, John S.	Jerome
Strom, A. W.	M

French, Horace L.	Lansing
Fryer, D. H.	Lansing
Galbraith, Dugald A.	Lansing
Gardner, C. B.	Lansing
Gibson, T. E.	M
Goldner, R. E.	M
Gunderson, G. O.	Lansing
Heald, Gordon	M
Harris, Dean W.	Lansing
Harris, H. W.	M
Harrold, J. F.	M
Hart, L. C.	Lansing
Haynes, Howard B.	Lansing
Haze, H. A.	Lansing
Heckert, Frank B.	Lansing
Heckert, J. K.	Lansing
Hendren, Owen	M
Henry, L.	Lansing
Hermes, E. J.	Lansing
Himmelberger, R. J.	M
Hodges, Kenneth P.	M
Holland, Chas. F.	E. Lansing
Huggert, Clare C.	Lansing
Hughes, H. A.	M
Huntley, Fred M.	Lansing
Hurth, M. S.	M
Johnson, K. H.	M

## ROSTER MSMS

Jones, Francis A.	Lansing	Meyer, H. R.	Lansing
Jones, Francis A. Jr.	Lansing	Miller, H. A.	Lansing
Kalmbach, R. E.	Lansing	Mitchell, A. B.	Lansing
Keim, C.	Lansing	Molner, Stephen K.	Lansing
Kelly, Wm. H.	M	Morrison, C. V.	Lansing
Kent, Edith Hall	Lansing	Morrow R.	M
Kent, Herbert K.	Lansing	Niles, B. D.	Lansing
Kielhorn, W. P.	M	O'Sullivan, Gertrude	Mason
Koppa, T. M.	Lansing	Phillips, R. H.	Lansing
Kraft, L. C.	Leslie	Pinkham, R. A.	Lansing
Kramer, S. D.	Lansing	Ponton, J.	Mason
Lang, R. R.	Lansing	Potter, Earl C.	M
Larabee, E. E.	Williamston	Prall, H. J.	Lansing
LeDuc, Don M.	M	Randall, O. M.	Lansing
Ley, Wilfred.	M	Rector, Frank L.	Lansing
Loree, Maurice C.	Lansing	Richards, F. D.	M
Lucas, T. A.	Lansing	Richardson, M. L.	Lansing
Ludlum, L. C.	Lansing	Roberts, D. W.	Okemos
Markuson, Kenneth E.	E. Lansing	Roberts, Russell R.	Lansing
Martin, Wayne.	Lansing	Robson, Edmund J.	M
McConnell, E. G. (R.)	Lansing	Rozan, J. S.	Lansing
McCormie, C. Ray.	E. Lansing	Rozan, M. M.	M
McCoy, Earl M.	Grand Ledge	Russell, Claude V. (R.)	Northport
McCrumb, R. R.	Lansing	Sander, John F.	M
McElmurry, Leland R.	Lansing	Sanford, Thomas M.	Lansing
McElmurry, N. K.	Perry	Seger, Fred L.	Lansing
McGillicuddy, Oliver B.	M	Shaw, Milton.	Lansing
McGillicuddy, R. J.	M	Shepherd, Clara S.	Lansing
McIntyre, J. Earl.	Lansing	Sherman, G. A.	E. Lansing
McNamara, B. E.	M	Sichtler, Harper G.	E. Lansing
McNamara, Wm. E.	Lansing	Silverman, Irving E.	M
McPherson, E. G.	Mt. Clemens	Smith, Anthony V.	Mason
Meade, Wm. H.	M	Smith, Lillian R.	Lansing
Mercer, Walter E.	M	Smith, H. M.	Lansing

## Ionia-Montcalm Counties

Benison, Arthur L.	M	Hansen, Carl M.	M
Bottling, A. E.	Portland	Hansen, M. M.	Greenville
Bird, Wm. L.	Greenville	Haskell, Robert H.	Northville
Bower, A. J.	Greenville	Hay, John R.	Saranac
Bracey, L. E.	Sheridan	Hoffs, M. A.	Lake Odessa
Bunce, E. P.	Trufant	Imus, H. L.	Ionia
Bunce, Leo.	Trufant	Johns, Joseph.	Ionia
Cook, Geo. H.	Ionia	Kelsey, L. E.	Lakeview
Dunkin, Lloyd S.	M	Kling, V. F.	M
Ferguson, F. H.	Carson City	Lilly, Isaac S.	Stanton
Fleming, J. C.	Pewamo	Lintner, Roy C.	Ludington
Fox, Harold M.	Portland	Marsh, F. M.	Ionia
Geib, O. P.	Carson City	Marston, L. L.	Lakeview
		McCann, John J.	Ionia

## Jackson County

Ahronheim, J. H.	M	Hanna, R. J.	M
Alter, R. H.	Jackson	Hardie, G. C.	Jackson
Anderson, W. B.	Jackson	Harris, Lester J.	Jackson
Appel, S.	M	Hicks, Glenn C.	Jackson
Baker, G. M.	Parma	Holst, John B.	M
Balconi, Henry.	Jackson	Huntley, W. B.	Jackson
Bartholic, F. W.	M	Hurley, H. L.	Jackson
Beckwith, S. A.	Stockbridge	Keefer, A. H.	Concord
Bullen, C. R.	Jackson	Kudner, Don F.	Jackson
Chabut, H. M.	Jackson	Lake, Wm. H.	Jackson
Chivers, R. W.	Jackson	LaVictore, Isaac N.	M
Clarke, C. S.	Jackson	Leahy, E.	Jackson
Cochrane, Wayne A.	Jackson	Lenz, C. R.	M
Cooley, Randall M.	Jackson	Leonard, Clyde A.	Jackson
Corley, C.	Jackson	Lewis, E. F.	Jackson
Corley, Ennis.	Jackson	Lejacono, Salvatore	Jackson
Cox, Ferdinand.	Jackson	Ludwick, J. E.	M
Crowley, Edward D.	M	McGarvey, W. E.	Jackson
Culver, Guy D.	Stockbridge	McLaughlin, M. J.	Jackson
DeMay, C. E.	Jackson	McLauthlin, Herbert B.	M
Dengler, C. R.	Jackson	Meads, J. B.	Jackson
Edmonds, J. M.	M	Miller, J. L.	M
Enders, W. H.	Jackson	Munro, C. D.	Jackson
Filip, H. K.	Jackson	Munro, James E.	Jackson
Finton, Walter L.	Jackson	Murphy, B. M.	M
Finton, W. R.	M	Newton, R. E.	Jackson
Foust, W. L.	Grass Lake	Olesky, S.	M
Gibson, F. J.	Jackson	O'Meara, James J.	Jackson
Glover, H. G.	(R.) Jackson	Otic, Grant L.	M
Gordon, D. L.	M	Payne, Andrew K.	Jackson
Greenbaum, Harry.	M	Phillips, G.	Jackson
Habenicht, Hilda.	Jackson	Porter, H. W.	Jackson
Hackett, T. E.	Jackson	Pray, Frank F.	Jackson
Hanft, Cyril F.	Springport	Pray, George R.	Jackson

## Kalamazoo County

Barrett, F. Elizabeth	Kalamazoo	Barrett, F. Elizabeth	Kalamazoo
Behan, Gerald W.	Galesburg	Benjamin, Margaret	Kalamazoo
Bennett, C. L.	Kalamazoo	Bennett, C. L.	Kalamazoo
Bennett, Keith.	M	Berry, J. F.	Kalamazoo
Bodmer, H. C.	Kalamazoo	Bodmer, H. C.	Kalamazoo
Borgman, Wallace.	M	Boys, C. E.	Kalamazoo

Snell, D. M.	Lansing	Snyder, LeMoynne M.	Lansing
Spencer, Perry.	M	Stanka, A. G.	Charlotte
Steiner, A. A.	M	Stiles, Frank.	M
Stringer, C. J.	Lansing	Strauss, P. C.	Lansing
★Sullivan, Ralph		Tamblyn, F. W.	Lansing
Swartz, Frederick C.	M	Thiehoff, E. V.	Lansing
Tallman, Frank F.	Lansing	Thomas, Lucius G.	M
Towne, Lawrence C.	Lansing	Toothaker, Kenneth.	M
Trescott, R. F.	M	Town, F. R.	Lansing
Troost, F. L.	Holt	Vander Slice, E. R.	Lansing
Vander Zalm, T. P.	M	Vanderburgh, H. B.	Lansing
Venier, J. H.	E. Lansing	Welch, Wm. H.	E. Lansing
Wadley, Ralph.	Lansing	Wellman, John.	M
Warford, J. T.	Lansing	Wetzel, John O.	Lansing
Webb, Roy O.	M	Wilensky, Thomas.	Lansing
Weber, Francis J.	Lansing	Wiley, Harold W.	Lansing
Weinburgh, H. B.	Lansing	Willson, Howard S.	Lansing
Whittemore, C.	Lansing	Wilson, Harry A.	Lansing

Aach, Hugo.	M
Alexander, C. A.	Kalamazoo
Anderson, K. A.	Kalamazoo
Andrews, Sherman.	M
Armstrong, Robert J.	Kalamazoo
Banner, Lawrence R.	Kalamazoo
Barnebee, J. W.	Kalamazoo

★Died in Military Service

## ROSTER MSMS

Den Bleyker, Walter	Kalamazoo	Jennings, W. O.	Kalamazoo
DeWitt, L. H.	Kalamazoo	Kavanaugh, Wm. R.	M
DeWitt, Norman	M	Kenzie, W. N.	Glendale, Calif.
Dowd, B. J.	M	Klerk, W. J.	M
Doyle, F. M.	M	Koestner, Paul	M
Ertell, Wm. Francis	Kalamazoo	Kuhs, Milton, L.	M
Fast, R. B.	Kalamazoo	Lambert, R. H.	Kalamazoo
Fopeano, John V.	M	Lang, W. W.	Kalamazoo
Fulkerson, C. B.	Kalamazoo	Lavender, Howard	Kalamazoo
Fuller, R. T.	Kalamazoo	Light, Richard	Kalamazoo
Fuller, Paul	M	Light, S. Rudolph	Kalamazoo
Gerstner, Louis	Kalamazoo	Littig, John	Kalamazoo
Gilding, Joseph	M	MacGregor, J. R.	M
Glenn, Audrey	Chicago, Ill.	Malone, James G.	M
Goodhue, Lolita	Kalamazoo	Margolis, Frederick	Kalamazoo
Grant, Frederick E.	Kalamazoo	Marshall, Don	M
Gray, Arthur S.	M	Marshall, Evelyn	Kalamazoo
Green, William	Kalamazoo	McCarthy, J. S.	Kalamazoo
Gregg, U. Sherman	Kalamazoo	McIntyre, Charles H.	M
Harter, Randolph S.	Schoolcraft	Moe, Carl Rex	M
Heersma, H. S.	Kalamazoo	Moffat, Gordon	Kalamazoo
Hildreth, R. C.	Kalamazoo	Morter, Roy A.	Kalamazoo
Hobbs, Edw. J.	Galesburg	Nell, Edward R.	M
Hoebke, Wm. G.	Kalamazoo	Nibbelink, B.	Kalamazoo
Holder, Charles	M	Okun, M. H.	M
Howard, W. H.	Galesburg	Osborne, Charles E.	M
Hubbell, R. J.	Kalamazoo	Patmos, Martin	M
Huyser, Wm. C.	Kalamazoo	Peelen, J. W.	M
Irwin, Wm. D.	M	Peebles, Matthew	M
Jackson, Howard C.	M	Perry, Clifton	Kalamazoo
Jackson, John B.	Kalamazoo	Pratt, F. A.	Kalamazoo

### Kent County

Adams, F. A.	M	Diskey, Donald	Grand Rapids
Aitken, George T.	M	Dixon, Willis L.	Grand Rapids
Alexander, Marshall O.	Grand Rapids	Doran, Frank	Grand Rapids
Alfenito, Felix S.	M	Droste, James C.	Grand Rapids
Allen, R. V.	Grand Rapids	Duiker, Henry	Grand Rapids
Bachman, G. A.	Grand Rapids	Eaton, Robert M.	M
Baert, George H.	Grand Rapids	Eggleson, H. R.	Grand Rapids
Baker, Abel J.	Grand Rapids	Failing, John F.	M
Ballard, M. S.	Grand Rapids	Fannoff, Frank L.	Grand Rapids
Balyeat, Gordon W.	M	Farber, Charles E.	M
Barber, Clarence H.	Grand Rapids	Faust, L. W.	Grand Rapids
Batts, Martin	M	Fee, G. Manson	M
Beaton, James H.	M	Fellows, Kenneth E.	M
Beeman, Carl B.	M	Ferguson, James	M
Beeman, C. E.	Grand Rapids	Ferguson, Lynn A.	Grand Rapids
Beets, W. Clarence	M	Ferguson, Ward S.	Grand Rapids
Bell, Charles M.	M	Ferrand, L.	M
Bettison, Wm. L.	M	Fitts, Ralph L.	M
Billings, Elton P.	Grand Rapids	Flynn, J. D.	M
Blackburn, Henry M.	Grand Rapids	Foshee, J. C.	Grand Rapids
Bloxsom, P. W.	Grand Rapids	Frantz, C. H.	M
Boelkins, Richard C.	M	Freyling, Robert	M
Boet, F. A.	Grand Rapids	Fuller, E. H.	Grand Rapids
Boet, John	M	Gaikema, E. W.	Grand Rapids
Bond, Geo. L.	Grand Rapids	Geenen, C. J.	Grand Rapids
Bosch, L. C.	Grand Rapids	Gibbs, F. F.	Grand Rapids
Brace, Fred	M	Gillet, O. H.	Grand Rapids
Brayman, C. W.	Cedar Springs	Grant, Lee O.	Grand Rapids
Brink, Russell	M	Graybiel, George	Caledonia
Brook, Jacob D.	Grandville	Griffith, L. S.	M
Buesing, O. R.	M	Haeck, Wm.	M
Buist, S. J.	Grand Rapids	Hagerman, D. B.	Grand Rapids
Bull, Frank L.	Sparta	Hammard, T. W. (R)	Grand Rapids
Burleson, John S.	Grand Rapids	Hardy, Faith F.	Grand Rapids
Burling, W. M.	Grand Rapids	Hayes, L. W.	Howard City
Burroughs, Frank M.	Grand Rapids	Heetderks, Dewey R.	Grand Rapids
Butler, Wm. J.	Grand Rapids	Henry, James, Jr.	Grand Rapids
Byers, Earl J.	Grand Rapids	Herrick, Ruth	Grand Rapids
Byrd, Mary Lou	Grand Rapids	Hill, A. Morgan	M
Campbell, Alexander	Grand Rapids	Hilt, Lawrence M.	M
Carpenter, Luther C.	M	Hodgen, J. T.	Grand Rapids
Chadwick, W. L.	M	Holcomb, J. W.	Grand Rapids
Chamberlain, L. H.	Grand Rapids	Holdsworth, M. J.	M
Chandler, Donald	Grand Rapids	Holkeboer, H. D.	Grand Rapids
Claytor, R. W.	Grand Rapids	Hollander, Stephen	M
Collisi, Harrison S.	M	Hooghyde, Jack	M
Colvin, W. G.	M	Houghton, G. D.	Caledonia
Corbus, Burton R.	Grand Rapids	Huffman, A. R.	Grand Rapids
Cosgrove, Wm. J.	M	Hunderman, Edward	Grand Rapids
Crane, Charles V.	Grand Rapids	Hutchinson, Robert J.	Grand Rapids
Crane, Harold D.	M	Hyland, W. A.	Grand Rapids
Dales, Ernest W.	Grand Rapids	Ingersoll, C. F.	M
Damstra, H. J.	M	Irwin, Thomas C.	Grand Rapids
Davis, D. B.	M	Jameson, Fred M.	M
Dean, Alfred W.	Grand Rapids	Jaracz, W. J.	Grand Rapids
DeBoer, Guy Wm.	M	Jarvis, Charles	Grand Rapids
DeMaagd, Gerald	Rockford	Kelly, Robert E.	M
DeMol, Richard J.	Grand Rapids	Kemmer, Thomas R.	Grand Rapids
Denham, R. H.	Grand Rapids	Kendall, Eugene L.	Grand Rapids
Denham, Robert H., Jr.	M	Klaus, C. D.	M
DePree, Isla G.	Grand Rapids	Kniskern, P. W.	M
DePree, Joseph	Grand Rapids	Kooistra, Henry P.	Grand Rapids
DeVel, Leon	M	Kratz, E. Ransom	M
DeVries, Daniel	M	Kremer, John	Grand Rapids
Dewar, M. M.	Grand Rapids	Kreulen, H. J.	Grand Rapids
Dick, Mark W.	M	Kriekard, P. J.	Grand Rapids
Dickstein, Bernard	M	Laird, Robert G.	Grand Rapids

\*Died in Military Service.

## ROSTER MSMS

Sluyter, J. S.....M  
 Smith, A. B.....Grand Rapids  
 Smith, Edwin M.....Grand Rapids  
 Smith, Ferris N.....Grand Rapids  
 Smith, R. Earle.....Grand Rapids  
 Snapp, Carl F.....Grand Rapids  
 Snyder, Clarence H.....Grand Rapids  
 Southwick, G. Howard.....Grand Rapids  
 Steffensen, W. H.....M  
 Stonehouse, G. G.....Grand Rapids  
 Stover, Virgil E.....M  
 Sugg, Cullen E.....Grand Rapids  
 Sus Strong, Carl A.....Grand Rapids  
 Swanson, H. C.....M  
 Swenson, Leland L.....M  
 Ten Have, J.....Grand Rapids  
 Tesseine, A. J.....M  
 Teusink, J. H.....Cedar Springs  
 Thompson, A. B. (E).....Grand Rapids

Thompson, Athol B.....Grand Rapids  
 Thompson, P. L.....Grand Rapids  
 Tidey, Marcus B.....Grand Rapids  
 Tiffany, Jos. C.....Grand Rapids  
 Torgerson, Wm. R.....Grand Rapids  
 Van Belois, Harvard J.....Grand Rapids  
 Van Bree, R. S.....Grand Rapids  
 Vanden Berg, Henry J.....Grand Rapids  
 Vander Meer, Ray.....M  
 Van Duine, H. J.....Byron Center  
 Vann, N. S.....Grand Rapids  
 Van Noord, Gelmer A.....Grand Rapids  
 Van Solkema, Andrew.....Grand Rapids  
 Van Solkema, Arthur.....M  
 Van Woerkom, Daniel.....Grand Rapids  
 Van Zwaluwenberg, Benj. R.....M  
 Veldman, Harold E.....Grand Rapids  
 Veenboer, Wm. H.....Grand Rapids  
 Venema, J. R.....Grand Rapids  
 Vis, Wm. R.....Grand Rapids

Vyn, J. D.....Grand Rapids  
 ★ Warmenhoven, Simon.....Grand Rapids  
 Warnshuis, F. C. (E).....Grand Rapids  
 Webb, Rowland.....Grand Rapids  
 Webber, Jerome.....M  
 Wedgwood, L. G.....Grandville  
 Wells, Merrill.....Grand Rapids  
 Wenger, Aaron V.....Grand Rapids  
 Wenger, John N.....Coopersville  
 Whalen, John.....M  
 Whinery, Joseph B.....Grand Rapids  
 Willits, P. W.....Grand Rapids  
 Wilson, Wm. E. (R).....Grand Rapids  
 Winfield, Emery D.....Grand Rapids  
 Winter, Garrett E.....Grand Rapids  
 Woodburne, A. R.....M  
 Wright, John M.....Grand Rapids  
 Wright, Thomas B.....Grand Rapids  
 Wurz, John F.....M  
 Yegge, J. P.....Kent City

### Lapeer County

Best, H. M.....Lapeer  
 Bishop, G. C.....Almont  
 Blakeslee, Merton C.....Lapeer  
 Chapin, Clarence D.....Columbiaville  
 Dorland, Clark.....M

Jackson, G. C.....M  
 McBride, J. R.....Lapeer  
 McLeod, K. W.....Lapeer  
 Merz, Henry G.....Lapeer  
 O'Brien, Daniel J.....Lapeer  
 Rehn, Adolph T.....Lapeer

Rohn, Mary.....Lapeer  
 Smith, G. L.....Imlay City  
 Thomas, J. Orville.....North Branch  
 Tinker, F. A. (E).....Lapeer  
 Zemmer, H. B.....Lapeer

### Lenawee County

Blair, Thomas.....Adrian  
 Blanchard, L. E.....Hudson  
 Bland, J. P.....Adrian  
 Campbell, C. A.....M  
 Clafin, G. M.....Adrian  
 Claxton, W. T.....M  
 Hall, George C.....M  
 Hammel, H. H.....M  
 Hardy, P. B.....Tecumseh  
 Heffron, Howard H.....Adrian  
 Helzerman, Ralph F.....M

Hewes, A. B.....Adrian  
 Hornsby, W. B.....Clinton  
 Howland, F. A.....Adrian  
 Iler, Harris D.....M  
 Jewett, Wm. E. Jr.....Adrian  
 Lamley, Arthur E.....Blissfield  
 McKenzie, W. S.....Adrian  
 McCue, Francis J. Jr.....M  
 McCue, F. J., Sr.....Hudson  
 Marsh, R. G. B.....M

Miller, Perry Lynford.....M  
 Morden, Elsi T.....Adrian  
 Pasternacki, Arthur S.....M  
 Patmos, Bernard.....M  
 Peters, W. L.....Morenci  
 Rawson, A. P.....M  
 Rogers, J. D.....M  
 Spalding, I. L.....Hudson  
 Stafford, Leo J.....Adrian  
 Van Dusen, C. A.....Blissfield  
 Wynn, G. H.....M

### Livingston County

Brigham, Jeannette.....Howell  
 Cameron, Duncan A.....M  
 Coughlin, Florence J.....Howell  
 Crandell, Claire H.....Howell  
 Duffy, Ray M.....Pinckney  
 Finch, E. D.....Howell

Glenn, B. H.....Fowlerville  
 Hayner, R. A.....M  
 Hendren, J. J.....Fowlerville  
 Hill, Harold C.....M  
 Huntington, H. G.....Howell  
 Laboe, Edward W.....Howell  
 Leslie, G. L.....M

McGregor, Archie J.....Brighton  
 McDowell, Guy Marshall.....Howell  
 Rednor, Daniel J.....Howell  
 Sigler, Hollis L.....Howell  
 Stephens, D. C.....M  
 Thal, Wm.....Howell

### Luce County

Bohn, Frank P. (E).....Newberry  
 Campbell, E. H.....Newberry  
 Franklin, Sidney.....Newberry  
 Gibson, R. E.....Newberry

Lance, Paul E.....M  
 Perry, Henry E.....Lakeland, Fla.  
 Purmort, Wm. R., Jr.....Newberry

Spinks, Robert E.....Newberry  
 Surrell, M. A.....M  
 Swanson, Geo. F.....M  
 Toms, Chas. B.....Newberry

### Macomb County

Banting, O. F.....Richmond  
 Berry, Henry G. (E).....Mt. Clemens  
 Croman, Joseph M., Jr. Mt. Clemens  
 Croman, Joseph M., Sr. (E).....Mt. Clemens  
 Duerloo, H. W.....M  
 Dudzinski, Edmund J.....M  
 Engels, J. A.....Richmond  
 Isbey, E. K.....Centerline  
 Kane, W. J.....Mt. Clemens

Lane, W. D.....Romeo  
 Maguire, A. J.....M  
 Moore, G. F.....Mt. Clemens  
 Parker, B. Morgan.....Utica  
 Reichman, Joseph J.....M  
 Rivard, Charles L.....M  
 Roth, G. E.....M  
 Ruedisueli, Clarence A.....Roseville  
 Rothman, A. M.....M  
 Salot, R. F.....M  
 Scher, Joseph N.....M

Stone, Elizabeth A.....Romeo  
 Sturm, Fred A.....St. Clair Shores  
 Thompson, A. A.....Mt. Clemens  
 Ullrich, R. W.....Mt. Clemens  
 Wellard, Henry C.....M  
 Whitley, Alec.....St. Clair Shores  
 Wilde, M. M.....Warren  
 Wiley, D. Bruce.....Utica  
 Wiley, Herbert H.....Utica  
 Wolfsen, V. H.....Mt. Clemens

### Manistee County

Grant, C. L.....Manistee  
 Hansen, E. C.....M  
 Konopa, John F.....M  
 Lewis, Lee A.....Manistee

MacMullen, Harlen D.....Manistee  
 Miller, E. B.....Manistee  
 Norconk, Ward H.....Bear Lake

Oakes, Ellery A.....Manistee  
 Ogilvie, G. D.....M  
 Quinn, Henry M.....Copemish  
 Ramsdell, Homer A.....Manistee

### Marquette-Alger County

Bennett, Arthur K.....Marquette  
 Berry, Robert F.....Marquette  
 Bertucci, J. P.....Ishpeming  
 Burke, R. A.....Palmer  
 Bottum, Charles N.....Marquette  
 Casler, W. L.....Marquette  
 Cooperstock, M.....Marquette

Corcoran, W. A.....Ishpeming  
 Drury, Charles P.....Marquette  
 Elzinga, E. R.....Marquette  
 Erickson, Arvid W.....Ishpeming  
 Fennig, F. A.....M  
 Hanelin, H. A.....M  
 Hartt, P. P.....Ishpeming

Hirwas, C. L.....Marquette  
 Hornbogen, D. P.....M  
 Howe, L. W.....Marquette  
 Janes, R. Grant.....M  
 Keskey, George I.....Marquette  
 Lambert, W. C.....Marquette  
 LeGolvan, C.....Marquette

\*Died in Military Service.

## ROSTER MSMS

McCann, Neal J.....Ishpeming  
Mudgett, W. A.....Negaunee  
Nicholson, J. B.....M  
Niemi, O. I.....M

Picotte, Wilfrid S.....Ishpeming  
Schutz, W. J.....M  
Sicotte, Isaiah .....Michigamme  
Talso, Jacob.....Ishpeming

Vandeenter, V. H.....Ishpeming  
Van Riper, Paul.....Champion  
Waldie, George McLeod. Ishpeming  
Wickstrom, Geo.....Munising

Benjamin, Clayton C.....Ludington  
Blanchette, Victor J.....Scottville  
Comodo, Nicholas M.....M

### Mason County

Goulet, L. J.....Ludington  
Hoffman, H. E.....M

Hunt, Ivan L.....Scottville  
Ostrander, R. A.....M  
Paukstis, Charles.....Ludington

### Mecosta-Osceola-Lake Counties

Bruggema, Jacob .....Evart  
Chess, Leo F.....Reed City  
Franklin, Benjamin L.....Remus  
Hall, Clifton.....Big Rapids  
Ivkovich, Paul.....M

Kilmer, Paul B.....Reed City  
Klein, J. Paul.....M  
MacIntyre, Donald.....Big Rapids  
McGrath, V. J.....Reed City  
Merlo, F. A.....Big Rapids

Peck, Louis K.....Berryton  
Phillips, R. W.....M  
Treynor, Thomas P.....Big Rapids  
White, J. A.....Big Rapids  
Yeo, Gordon H.....Big Rapids

### Medical Society of North Central Counties Otsego-Montmorency-Crawford-Oscoda-Roscommon-Ogemaw Counties

Beeby, Robt. J.....West Branch  
Clippert, C. G.....Grayling  
Coulter, Keith D.....Gladwin  
Drescher, Geo. A.....Lewiston  
Egle, Joseph L.....Gaylord

Harris, Levi A.....(E) Gaylord  
Hendricks, Henning V.....Kalkaska  
Jardine, Hugh.....West Branch  
Keyport, C. R.....Grayling  
Lanting, Roelof.....M  
Martzowka, M. A.....Roscommon

McDowell, Douglas B.....M  
McKillip, G. L.....Gaylord  
Peckham, Richard.....Gaylord  
Sargent, Leland E.....Jackson  
Stealy, Stanley A.....M

DeWane, F. J.....Menominee  
Flanagan, Clarence B.....Menominee  
Heidenreich, John R.....M  
Jones, Wm. S.....Menominee

Kaye, J. T.....Menominee  
Kerwell, K. C.....Stephenson  
Mason, Stephen C.....Menominee  
Peterson, A. R.....Daggett

Sawbridge, Edward. (E) Stephenson  
Sethney, Henry T.....Menominee  
Sethney, Walter F.....M  
Towey, J. W.....Powers

Ballmer, Robert S.....Midland  
Gay, Harold H.....Midland  
Grewe, N. C.....Midland  
High, C. V., Jr.....Midland  
Howe, Irvin M.....Midland

Linsenmann, Karl.....Midland  
MacCallum, Charles.....Midland  
Maynard, W. A.....Coleman  
Meisel, Edward H.....M  
Nicholas, Mildred.....Midland  
Pike, Melvin H.....Midland

Rice, Robert E.....Midland  
Sherk, J. H.....Midland  
Sjorlander, Gust.....Midland  
Towsley, W. D.....Midland  
Von Haitinger, Kalmon S.....M

Acker, Wm. F.....Monroe  
Ames, Florence.....Monroe  
Balk, A. C.....Monroe  
Barker, Vincent L.....M  
Blakey, L. C.....Monroe  
Bond, W. W.....M  
Cohen, H. Herbert.....M  
Denman, D. C.....M  
Dusseau, S. V.....(E) Erie  
Ewing, R. T.....Monroe  
Fieldhouse, B. J.....Ida  
Flanders, J. P.....M  
Gelhaus, Wm. J.....Monroe

Golinvaux, C. J.....Monroe  
Goodman, Louis.....M  
Heffernon, John F.....Carleton  
Hensel, Hilda .....Monroe  
Heustis, Albert E.....Monroe  
Hunter, M. A.....M  
Johnson, A. Esther.....Monroe  
Landon, Herbert W.....Monroe  
Long, Edgar C.....M  
Long, Sara .....Monroe  
McDonald, T. A.....Monroe  
McGoech, R. W.....Monroe  
McMillan, J. H.....Monroe

Meck, H. L.....Dundee  
Parmelee, O. E.....Lambertville  
Penzotti, Stanley .....M  
Pinkus, Hermann .....Monroe  
Reisig, A. H.....M  
Sanger, Emerson J.....Monroe  
Siffer, J. J.....Monroe  
Stolpestad, C. T.....M  
Tomlinson, L. H.....Newport  
Wagar, Spencer.....Rockwood  
Williams, R. J.....M  
Williamson, George W.....Dundee

Anderson, A. J.....Muskegon  
Anderson, Axel W.....Lakewood Club  
August, R. V.....Muskegon  
Bartlett, F. H.....Muskegon  
Barnard, Helen.....Muskegon  
Beers, Charles.....Muskegon Hgts.  
Benedict, A. L.....M  
Bloom, C. J.....Muskegon  
Boyd, D. R.....Muskegon  
Bradshaw, Park S.....Muskegon  
Chapin, Wm. S.....Muskegon Hgts.  
Closz, H. F.....Muskegon  
Cohan, Sol G.....Muskegon  
Collier, C. C.....Whitehall  
D'Alcorn, Ernest.....Muskegon  
Dasler, A. F.....M  
Derezinski, Clement F.....Muskegon  
Diskin, Frank.....M  
Douglas, Robert.....M  
Durham, C. J.....Muskegon  
Dykhuisen, Harold D.....Muskegon  
Eckerman, C. T.....Muskegon  
Fillingham, Enid.....Muskegon  
Fleischman, C. B.....Muskegon  
Fleishman, Norman.....M  
Foss, Ed. O.....Muskegon

Garber, F. W., Jr.....Muskegon  
Garland, J. O.....Muskegon  
Gillard, James.....M  
Goltz, Martha H.....Montague  
Griffith, Robt. M.....M  
Hagen, Wm. A.....Muskegon  
Hannum, F. W.....Muskegon  
Harrington, A. F.....Muskegon  
Harrington, R. J.....Muskegon  
Hartwell, S. W.....M  
Heneveld, John.....Muskegon  
Holly, Leland E.....Muskegon  
Holmes, Roy H.....M  
Jackson, S. A.....Muskegon  
Kane, Thomas J.....M  
Keilin, Marie .....Muskegon  
Kerr, H. J.....M  
Kniskern, E. L.....Muskegon  
LaCore, O. M.....Muskegon Hts.  
Lange, E. W.....Muskegon  
Lauretti, Emil.....Muskegon  
Laurin, V. Samuel.....Muskegon  
LeFevre, Louis.....M  
LeFevre, Wm. M.....Muskegon  
Loder, Leonel Lewis.....Muskegon  
Loomis, John L.....Muskegon  
Mandeville, C. B.....Muskegon

Medema, Paul E.....Muskegon  
Meengs, M. B.....M  
Miller, Philip L.....M  
Morford, F. N.....Muskegon  
Morse, Bertram W.....M  
Mulligan, A. W.....Muskegon  
Oden, Constantine L.....Muskegon  
Petkus, Antonie.....Muskegon  
Pettis, Emmett.....Muskegon  
Powers, Lunette.....Muskegon  
Price, Leonard.....M  
Pyle, H. J.....Muskegon  
Risk, R. A.....Muskegon  
Risk, R. D.....M  
Scholle, N. W.....M  
Ryan, Wm. J. J.....Muskegon  
Sears, Richard.....Muskegon  
Stone, Maxwell E.....Muskegon  
Struthers, J. N. P.....Muskegon  
Swartout, W. C.....Muskegon  
Teifer, Charles A.....Muskegon  
Thieme, S. W.....Ravenna  
Thornton, E. S.....Muskegon  
Wiersma, Silas C.....Muskegon  
Wilke, C. A.....Montague  
Wilson, P. S.....Muskegon

## ROSTER MSMS

### Newaygo County

Black, B. F.	Holton	
Deur, T. R.	Grant	
Geerlings, Lambert	Fremont	
Geerlings, Lewis J.	M	

O'Neill, J. W.	White Cloud
Saxen, Raymond T.	White Cloud
Stryker, O. D.	Fremont
Tompson, Arthur C.	Hesperia

### Northern Michigan Medical Society Antrim-Charlevoix-Cheboygan-Emmet Counties

Benson, A. H.	Mancelona	
Beuker, Bernard	East Jordan	
Blum, Benjamin B.	M	
Burns, Dean C.	Petroskey	
Chapman, W. E.	Cheboygan	
Conkle, Guy C.	Boyne City	
Conti, Joseph	M	
Conway, Wm.	M	
Duffie, Don Hastings	Central Lake	
Frank, Gilbert E.	Harbor Springs	
Gervers, John H. R.	Bellaire	
Giffords, Mark	M	

Gilpin, John H.	Cheboygan	
Hegener, A. J.	Petroskey	
Larson, Walter E.	Cheboygan	
Lashmet, Floyd H.	Petroskey	
Lilgas, Harris V.	M	
Litzenburger, A. F.	Boyne City	
Mast, W. H.	Petroskey	
Mayne, Frederick C.	Cheboygan	
McCarroll, James C.	Cheboygan	
McCune, Wm. Stanley	M	
McLeod, M. M.	Petroskey	

McMillan, Fraley	Charlevoix
McMillan, Lyle D.	Mackinaw City
Miller, Samuel L.	M
Palmer, Russell	St. James
Parks, W. H.	Petroskey
Reed, Wilbur F. (E.)	Cheboygan
Rodgers, John	Bellaire
Saltonstall, G. B.	Charlevoix
Stringham, J. R.	Cheboygan
Van Dellen, Jerrian	East Jordan
Winter, Joseph A.	M
Wood, George	Onaway

### Oakland County

Abbott, V. C.	M	
Arnkoff, Harry	Pontiac	
Aschenbrenner, Z. R.	Farmington	
Baker, Frederick A.	Pontiac	
Baker, Robert H.	Pontiac	
Barker, Howard B.	Pontiac	
Bauer, Ernest W.	Hazel Park	
Beattie, W. G.	Ferndale	
Beck, O. O.	Birmingham	
Benning, C. H.	M	
Berg, Richard H.	Oxford	
Borland, Alex	Pontiac	
Burke, Chauncey G.	Pontiac	
Boucher, R. E.	M	
Butler, Samuel A.	Pontiac	
Callhoun, T. Ethel	Birmingham	
Campbell, Malcolm D.	M	
Capano, Oreste A.	Pontiac	
Carr, Wm. H.	Holly	
Christie, E. A.	Pontiac	
Christie, J. W.	M	
Church, J. E.	Pontiac	
Cobb, Leon F.	Pontiac	
Cobb, Thomas H.	Pontiac	
Cooper, Robt. J.	M	
Crissman, H. C.	Ferndale	
Cudney, Ethan B.	Pontiac	
Dahlgren, Carl	Keego Harbor	
Darling, C. G., Jr.	Pontiac	
Dobski, Edwin J.	M	
Domeier, L. H.	M	
Ekelund, Clifford T.	Pontiac	
Farnham, L. A.	Pontiac	
Faulconer, Albert	M	
Ferris, Ralph G.	Birmingham	
Fitzpatrick, Francis	Pontiac	
Flick, Earl J.	M	
Flick, John R.	Royal Oak	
Foust, Earl	M	
Fox, John W.	Pontiac	
Francis, Donald	M	
Furlong, Harold A.	M	
Gaensbauer, Ferdinand	Pontiac	
Gariepy, Bernard F.	Royal Oak	
Gately, C. R.	M	
Gately, Warren L.	Pontiac	
Gehringer, Norman F.	M	
Geib, Ormond D.	Rochester	

Gerls, Frank B.	Pontiac	
Gibson, Wellington C.	Pontiac	
Gordon, J. H.	Birmingham	
Grant, Wm. A.	Milford	
Green, Wm. M.	Pontiac	
Hackett, Daniel J.	Pontiac	
Halsted, Lee H.	Farmington	
Hammer, Carl W.	M	
Hammonds, E. E.	M	
Harvey, Campbell	Pontiac	
Hasner, R. B.	Royal Oak	
Hassberger, J. B.	M	
Hathaway, Clarence L.	Lake Orion	
Hathaway, Wm.	Rochester	
Henry, Colonel R. C.	Ferndale	
Hensley, C. B.	Lake Orion	
Howlett, E. V.	Pontiac	
Hoyt, D. F.	M	
Hubert, John R.	M	
Huffman, M. R.	Milford	
Hume, T. W. K.	Auburn Heights	
Hurst, Daniel D.	Pleasant Ridge	
Hutchinson, W. G.	Pontiac	
Jones, Morrell M.	Drayton Plains	
Kemp, Felix J.	Pontiac	
Kemp, W. Lloyd	Birmingham	
Kimball, A. S.	Pontiac	
Kirkup, Norman N.	Hazel Park	
Koehler, Wm. H.	Royal Oak	
Lambie, John S.	Pontiac	
Lambert, Alvin G.	Ferndale	
Larson, B. T.	Pontiac	
Lass, E. H.	M	
Lewis, S. M.	Ferndale	
Little, J. W.	M	
Lockwood, C. E.	Holly	
MacKenzie, O. R.	Walled Lake	
Margrave, Edmund D.	Royal Oak	
Markley, John M.	M	
Mason, Robt. J.	M	
McConkie, J. P.	Birmingham	
McEvoy, Francis J.	M	
McNeill, H. H.	Pontiac	
Meinke, Herman A.	Hazel Park	
Mercer, Frank A.	Pontiac	
Merrill, Lionel N.	Royal Oak	
Mitchell, B. M.	Pontiac	
Monroe, John D.	Pontiac	

Mooney, C. A.	Ferndale
Needle, Francis	M
Newcomb, Arnold B.	Berkley
Norup, John	Berkley
Nosanchuk, Joseph	M
Ohlmacher, A. P.	M
Olsen, Richard E.	M
★Osgood, W. S.	
Pauli, Theodore H.	M
Pool, H. H.	Pontiac
Porritt, Ross J.	M
Ports, Preston W.	M
Reid, F. T.	Clawson
Rennell, E. J.	Pontiac
Riker, Aaron D.	Pontiac
Roehm, Harold R.	Birmingham
Rowley, Laurie G.	Drayton Plains
Russell, Vincent P.	M
St. John, Harold A.	Pontiac
Schlecte, E. Carl	M
Schlecte, Eva Mirian	Rochester
Schoenfeld, John B.	M
Seaborn, A. J.	Royal Oak
Shadley, Maxwell	M
Sheffield, L. C.	Pontiac
Simpson, E. K.	Pontiac
Smith, Carleton A.	M
Smith, Donald S.	M
Smith, Ellen	Pontiac
Spears, M. L.	Pontiac
Spencer, Lloyd H.	M
Spehr, Eugene L.	M
Spohn, Earl W.	M
Stahl, Harold F.	Oxford
Stanley, Wm. F.	M
Starker, C. T.	Pontiac
Steinberg, Norman	Royal Oak
Stolpman, A. K.	M
Sutton, Palmer E.	Royal Oak
Swickle, Edward F.	Royal Oak
Tuck, Raymond G.	Pontiac
★Terry, Stewart	
Ulloth, Milton J.	Ortonville
Vatz, Jack A.	Pontiac
Wagley, P. V.	M
Wagner, Ruth E.	Royal Oak
Wentz, A. E.	M
Young, Arthur R.	Pontiac
Zonnis, Marian E.	Pontiac

Day, Clinton	Hart	
Flint, Charles	M	
Hayton, A. R.	Shelby	
Heard, Wm.	Pentwater	

Heysett, N. W.	Austin, Texas	
Jensen, Viggo	Shelby	
Lemke, Walter M.	M	
Munger, L. P.	Hart	

### Ontonagon County

Pinkerton, W. J.	Ramsay	
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Rubenfeld, S. H.	M	
Strong, W. F.	Ontonagon	

Bender, Jesse L.	Mass	
Hogue, H. B.	Ewen	

Beernink, E. H.	Grand Haven	
Bloemendaal, D. C.	Zeeland	
Bloemendaal, W. B.	Grand Haven	
Boone, Cornelius E.	Zeeland	

★Died in Military Service.

### Ottawa County

Clark, Nelson H.	M	
Cook, Carl S.	M	
Costello, C. V.	Holland	
DeVries, H. G.	Holland	
De Witt, S. L.	Grand Haven	
Hamelink, M. H.	Holland	

Harms, H. P.	M
Kemme, Gerrit	Zeeland
Kitchel, John	Grand Haven
Kitchel, Mary	Grand Haven
Kools, Wm. C.	Holland
Leenhouts, Abraham	(E.) Holland

## ROSTER MSMS

Nichols, Rudolph H..... Holland  
 Nykamp, Russell..... Zeeland  
 Presley, Wm. J..... Grand Haven  
 Rypkema, Willard M..... M

Stickley, A. E..... Coopersville  
 Ten Have, Ralph..... Grand Haven  
 Timmerman, E. C..... M  
 Van Appledorn, Chester J..... Holland  
 Van Der Berg, E..... Holland

Van Der Velde, O..... Holland  
 Westrate, Wm..... Holland  
 Winter, John K..... Holland  
 Winter, Wm. G..... M

### Saginaw County

Ackerman, G. L..... Saginaw  
 Bagley, U. S..... Saginaw  
 Bagshaw, David E..... Saginaw  
 Berberovich, T. F..... Saginaw  
 Bishop, H. M..... M  
 Brock, W. H..... Saginaw  
 Bruton, Martin F..... Saginaw  
 Busch, Frank J..... Saginaw  
 Butler, M. G..... M  
 Button, A. C..... Saginaw  
 Cady, F. J..... Saginaw  
 Cameron, Allen K..... Saginaw  
 Campbell, L. A..... Saginaw  
 Catizone, R. J..... Merrill  
 Chisena, Peter R..... M  
 Claytor, Archer A..... Saginaw  
 Cortopassi, Andre..... Saginaw  
 Cortopassi, V. E..... M  
 Cory, C. W..... M  
 Curts, James..... M  
 Durman, Donald..... Saginaw  
 Ely, C. W..... Saginaw  
 Ernst, Arthur R..... Saginaw  
 Eymer, Esther..... Saginaw  
 Fleschner, Thos. E..... Birch Run  
 Gage, David P..... Saginaw  
 Galsterer, E. C..... Saginaw  
 Gerber, Herbert..... M  
 Goman, Louis D..... Saginaw  
 Grigg, Arthur..... Saginaw  
 Grigg, Arthur P..... M  
 Hand, Eugene..... M  
 Harvie, L. C..... Saginaw

Helmkamp, H. C..... Saginaw  
 Hester, E. G..... M  
 Hill, Victor L..... Saginaw  
 Hohn, Fred J..... Saginaw  
 Howell, Don M..... Saginaw  
 Iberman, Harold M..... M  
 Jaenichen, R..... Saginaw  
 James, J. W..... M  
 Jiroch, R. S..... Saginaw  
 Jordan, Leo A..... Saginaw  
 Keller, S. S..... Saginaw  
 Kemp, J. N..... Saginaw  
 Kempton, R. M..... Saginaw  
 Kerr, Wm..... M  
 Kirchgeorge, Clemens..... Frankenmuth  
 Kleekamp, H..... Saginaw  
 Knott, Harriet A..... Saginaw  
 Kowals, F. V..... Saginaw  
 Lohr, O. W..... Saginaw  
 Longstreet, Martha L..... Saginaw  
 Luger, F. E..... M  
 Lurie, Robt..... M  
 Lyle, R. C..... Frankenmuth  
 MacKinnon, Edwin D..... Saginaw  
 MacMeekin, James W..... M  
 Martzowka, Wm. P..... Saginaw  
 Maurer, J..... Saginaw  
 Maurer, John A..... M  
 Mayne, Harold E..... Saginaw  
 McGregor, R..... Saginaw  
 McKinney, Alex R..... Saginaw  
 McLandress, Joshua A..... Saginaw  
 Markey, J. P..... Saginaw  
 Meyer, Henry J..... Saginaw

Mikan, V. Robt..... Saginaw  
 Moon, A. R..... Saginaw  
 Mudd, Richard D..... M  
 Murphy, Albert P..... Saginaw  
 Murray, Chas. R..... M  
 Novy, F. O..... Saginaw  
 O'Reilly, Wm. J..... (E) Saginaw  
 Ostrander, Frank W..... Freeland  
 Phillips, Homer A..... M  
 Pietz, Frederick..... Saginaw  
 Pillsbury, Edward A..... Frankenmuth  
 Poole, Frank..... Saginaw  
 Potvin, Clifford..... M  
 Richards, Ned W..... M  
 Richter, Harry J..... M  
 Ryan, M. D..... (E) Saginaw  
 Ryan, R. S..... M  
 Sample, J. T..... Saginaw  
 Schaiberger, Elmer G..... Saginaw  
 Schneider, Alexander..... M  
 Sheldon, S..... M  
 Skowronski, Casimer A..... M  
 Slack, Walter K..... M  
 Stander, A. C..... M  
 Stewart, George W..... M  
 Stillier, A. F..... Saginaw  
 Thomas, Dale..... Saginaw  
 Tiedke, G. E..... M  
 Toshach, C. E..... Saginaw  
 Treshler, H. J..... Saginaw  
 Wallace, H. C..... M  
 Westlund, Norman..... Saginaw  
 Wilson, H. R..... Saginaw  
 Yntema, S..... M

### St. Clair County

Armsbury, A. B..... Marine City  
 Atkinson, J. M..... Port Huron  
 Attridge, J. A..... Port Huron  
 Banting, K. C..... M  
 Battley, J. C. S..... Port Huron  
 Beck, Frank K..... Port Huron  
 Biggar, R. J..... M  
 Borden, C. L..... Port Huron  
 Boughner, W. H..... Algonac  
 Bovee, M. E..... Port Huron  
 Brush, Howard O..... Port Huron  
 Burke, Ralph M..... Port Huron  
 Burley, Jacob H..... Port Huron  
 Callery, A. L..... Port Huron  
 Campbell, R. H..... St. Clair  
 Carey, Lewis M..... Detroit  
 Clyne, B. C..... M

Cooper, Thomas H..... Port Huron  
 DeGurse, T. E..... Marine City  
 Derck, W. P..... Port Huron  
 Edwards, A. C..... Port Huron  
 Fraser, Robt. C..... Port Huron  
 Hall, W. E. B..... Port Huron  
 Heavenrich, Theo. F..... Port Huron  
 Holcomb, R. J..... Marine City  
 Kesl, Geo. Matthew..... Port Huron  
 LeGalley, K. B..... M  
 Licker, R. R..... M  
 Ludwig, F. E..... M  
 Martin, C. S..... Port Huron  
 McColl, D. J..... Port Huron  
 McColl, Neil J..... Port Huron  
 MacPherson, C. A..... St. Clair

Meredith, E. W..... Port Huron  
 Patterson, D. Webster..... Port Huron  
 Pollock, Donald A..... Yale  
 Reynolds, Annie E..... Port Huron  
 Ryerson, W. W..... Port Huron  
 Schaefer, W. A..... Port Huron  
 Searles, Karl F..... Capac  
 Sites, E. C..... Port Huron  
 Thomas, C. F..... Port Huron  
 Treadgold, Douglas..... Port Huron  
 Ware, John R..... Port Huron  
 Wass, Henry C..... St. Clair  
 Waters, George..... Port Huron  
 Wellman, Joseph E..... Port Huron  
 Wight, Wm. G..... Yale  
 Witter, Gordon L..... M  
 Zemmer, A. L..... Port Huron

### St. Joseph County

Berg, Lawrence A..... M  
 Brunson, A. E..... Colon  
 Corkill, C. C..... White Pigeon  
 Fiegel, S. A..... M  
 Hoekman, Aben..... M  
 Holm, Arvid G..... M  
 Kane, David M..... Sturgis

Miller, C. G..... Sturgis  
 Parrish, Marion F..... Sturgis  
 Pennington, H. C..... M  
 Porter, C. G..... Three Rivers  
 Raisch, Fred J..... M  
 Reed, Fred R..... Three Rivers  
 Rice, John W..... M

Shaw, G. D..... M  
 Sheldon, J. P..... M  
 Slote, L. K..... Constantine  
 Springer, R. A..... Centerville  
 Sweetland, G. J..... Constantine  
 Wilkerson, Nina C..... Sturgis  
 Zimont, R. D..... M

### Sanilac County

Blanchard, E. W..... Deckerville  
 Ellis, N. J..... Croswell  
 Gift, W. A..... Marlette  
 Hart, R. K..... Croswell

Koch, D..... M  
 Learmont, H. H..... Croswell  
 McGunegle, K. T..... Sandusky  
 Norgaard, Hal V..... M

Seager, M. Cole..... Brown City  
 Tweedie, G. Evans..... Sandusky  
 Tweedie, S. Martin..... Sandusky  
 Webster, John C..... Marlette

### Shiawassee County

Alexander, Reuben G..... Laingsburg  
 Arnold, A. L..... Owosso  
 Arnold, A. L., Sr. (E)..... Owosso  
 Backe, John C..... M  
 Brandel, J. M..... M  
 Brown, Richard J..... M  
 Buzzard, Walter Davenport..... M  
 Cramer, Geo. L. G. (E)..... Owosso  
 Fillinger, W. B..... Ovid

Hoshal, Vern L..... Durand  
 Hume, Arthur M. (E)..... Owosso  
 Hume, Harold A..... Owosso  
 Janci, Julius..... M  
 Kaufman, H. J..... M  
 Lanting, Helen E..... Owosso  
 Linden, V. E..... M  
 McKnight, E. R..... M  
 Parker, W. T..... Owosso  
 Pochert, R. C..... Owosso

Richards, C. J..... Durand  
 Shepherd, W. F..... M  
 Slagh, E. M..... M  
 Soule, Glen T..... Henderson  
 Watts, Fred A..... Owosso  
 Weinkauf, W. F..... Corunna  
 Weston, C. L..... Owosso  
 Wilcox, Anna L..... Owosso  
 Wilcox, C. M..... M

## ROSTER MSMS

### Tuscola County

Barbour, Harry A.	Mayville
Bates, George (E)	Kingston
Berman, Harry	Millington
Cook, Raymond, R.	Akron
Dickerson, W. W.	Caro
Dixon, Robt. L.	Wahjamega
Donahue, H. Theron	Cass City
Fisher, Robt. E.	M
Flett, Richard	Millington
Fox, Denton B.	Wahjamega
Gugino, Frank J.	M
Hoffman, T. E.	M
Howlett, R. R.	M
Johnson, O. G.	Mayville
Kaven, G. H.	Unionville
MacRae, L. D.	Gagetown
Merrill, Elmer H.	Caro
Morris, Frank L.	Cass City

Rundell, Annie S.	Vassar
Ruskin, D. B.	Caro
Savage, Lloyd L.	Caro
Shoemaker, J. C.	Vassar
Spohn, U. G.	Fairgrove
Starmann, Bernard	Cass City
Swanson, E. C.	Vassar
Vail, Harry F.	M
Von Renner, Otto	Vassar

### Van Buren County

Boothby, F. M.	Lawrence
Bope, Wm. P.	Decatur
Buckborough, M. W.	S. Haven
Diephuis, Bert	M
French, Merle R.	Paw Paw
Gano, Avison	M
Giddings, Ralph R.	M
Greenman, Newton H.	Decatur
Hall, E. J.	M
Hasty, Willis A.	M
Hoyt, W. F.	(E) Paw Paw
Iseman, Joseph W.	M
Itzen, J. F.	South Haven
Jamieson, J. K.	Paw Paw
Laird, Emma	Paw Paw
Lowe, Edwin G.	Bangor
Maxwell, J. Chas.	Paw Paw
McNabb, A. A.	Lawrence
Murphy, Norman D.	Bangor

Penoyer, C. L.	South Haven
Sayre, Phillip P.	South Haven
Spalding, R.	Gobles
Steele, Arthur H.	Paw Paw
Ten Houten, Chas.	M
Terwilliger, Edwin	M
Urist, Martin J.	South Haven
Williams, F. N.	Hartford
Young, Wm. R.	Lawton

### Washtenaw County

Agate, George H.	M
Alexander, John	Ann Arbor
Armstrong, Richard C.	M
Badgley, C. E.	Ann Arbor
Baer, Louis S.	M
Baker, David	Ann Arbor
Barker, Paul S.	M
Barnes, Allan C.	M
Barnwell, John B.	Ann Arbor
Barr, Albert S.	Ann Arbor
Bass, Harold D.	Ypsilanti
Bassow, Paul H.	Ann Arbor
Bauer, Gerhard H.	M
Baugh, Richard H.	Ypsilanti
Beall, John G.	Ann Arbor
Beebe, Hugh M.	Ann Arbor
Bell, Margaret	Ann Arbor
Belsler, Walter	Ann Arbor
Bethell, Frank H.	Ann Arbor
Boyer, Philip A.	Ann Arbor
Brace, Wm. M.	Ann Arbor
Breakkey, J. F.	(R) Ann Arbor
Britton, H. B.	Ypsilanti
Brown, Phillip N.	Ypsilanti
Bruce, James D.	Ann Arbor
Bullington, Bert M.	M
Bulmer, Dan J.	M
Buscaglia, C. J.	M
Buxton, Robt W.	Ann Arbor
Camp, Carl D.	Ann Arbor
Clements, Glenn T.	Ann Arbor
Cody, Claude C.	Ann Arbor
Coller, Frederick A.	Ann Arbor
Congor, Kyril B.	M
Conn, Jerome W.	Ann Arbor
Cooper, Ralph R.	M
Coxon, A. Wm.	Ann Arbor
Crabtree, Peter	M
Cummings, H. H.	Ann Arbor
Curtis, Arthur C.	Ann Arbor
Davis, Fenimore E.	M
Day, A. Jackson	M
deAlvarez-Skinner, R. R.	M
DeJong, Russell	Ann Arbor
DeTar, John S.	Milan
Dimitroff, Sim	M
Dingman, Reed O.	Ann Arbor
Donaldson, S. W.	Ann Arbor
Dowman, Chas. E.	M
Duff, Ivan F.	M
Dunstone, H. C.	Ypsilanti
Engelke, Otto K.	Ann Arbor
Everett, Meldon	Ann Arbor
Failing, Joseph H.	San Marino, Cal.
Falls, Harold F.	Ann Arbor
Farrior, J. Brown	M
Field, Henry J.	Ann Arbor
Fitzgerald, Thomas D.	M
Fletcher, Donald B.	M
Forsythe, Warren E.	Ann Arbor
Foster, D. Bernard	Ann Arbor
Fralick, F. Bruce	Ann Arbor
Freyberg, Richard H.	Ann Arbor
Frye, Carl H.	Ann Arbor
Furstenberg, A. C.	Ann Arbor
Ganzhorn, Edwin C.	Ann Arbor
Gardiner, Sprague	M
Fox, Denton B.	Wahjamega
Gugino, Frank J.	M
Hoffman, T. E.	M
Howlett, R. R.	M
Johnson, O. G.	Mayville
Kaven, G. H.	Unionville
MacRae, L. D.	Gagetown
Merrill, Elmer H.	Caro
Morris, Frank L.	Cass City
Gates, John L.	Ann Arbor
Gates, Neil A.	Ann Arbor
Green, Mervin E.	M
Green, Nelson W.	Detroit
Guilde, Andros	Chelsea
Haas, Reynold L.	Ann Arbor
Hagerman, Geo. W.	M
Haight, Cameron	Ann Arbor
Hammond, Geo.	M
Hammond, W. W.	Plymouth
Handorf, H. H.	Northville
Hannum, M. R.	Milan
Harris, Bradley M.	M
Haynes, Harley A.	Ann Arbor
Healey, Claire E.	Ann Arbor
Henry, L. Dell	Ann Arbor
High, Howard C.	M
Himler, Leonard E.	Ann Arbor
Hirschfield, Alex H.	M
Hodges, Fred J.	Ann Arbor
Holt, John F.	Ann Arbor
Howard, S. C.	Ann Arbor
Howell, Roger W.	Ann Arbor
Howes, H. A.	M
Hunt, Homer H.	M
Jay, Baird D.	M
Jimenez, Buenaventura	Ann Arbor
Johnson, Lester J.	M
Johnson, Sture A. M.	Ann Arbor
Johnston, Franklin D.	Ann Arbor
Jordan, Paul H.	M
Juracsek, Valeria R.	Ann Arbor
Kahn, Edgar A.	M
Keller, Arthur P.	M
Kemper, J. W.	Ann Arbor
Kiehn, Clifford L.	M
Kleinenschmidt, E. E.	Chevy Chase, Md.
Kleinenschmidt, Gladys	Chevy Chase, Md.
Klingman, Theophil	Ann Arbor
Knoll, Leo	Ann Arbor
LaFever, Sidney L.	Ann Arbor
Lane, Edwin C.	Ypsilanti
Lawther, John	Portland, Ore.
Law, John L.	Ann Arbor
Levin, Manuel	M
Lichty, Dorman E.	Ann Arbor
List, Carl F.	Ann Arbor
Lynn, Harold P.	Ypsilanti
Lyons, Richard H.	Ann Arbor
MacIntyre, Dugald S.	M
MacKaye, Lavinia G.	Ann Arbor
Malcolm, Karl D.	Ann Arbor
Marshall, Mark	Ann Arbor
Martin, Donald W.	Ypsilanti
Maxwell, J. H.	Ann Arbor
McCotter, Rollo E.	Ann Arbor
McEachern, Thomas H.	Ann Arbor
Means, Myron G.	Ann Arbor
Metzger, Ida	Ypsilanti
Milford, Albert F.	Ypsilanti
Miller, Harold	M
Miller, Norman F.	Ann Arbor
Moore, Donald F.	M
Morrow, Grant	Ann Arbor
Muehlig, George F.	Ann Arbor
Myers, Dean W.	Ann Arbor

Nesbit, Reed M.	Ann Arbor
Newton, Chas W.	Ann Arbor
Oliphant, L. W.	Ann Arbor
Palmer, Alger A.	M
Pannabecker, Chas. L.	Ann Arbor
Parsons, Robt. Jerome	Ann Arbor
Patterson, Ralph M.	Ann Arbor
Peet, Max M.	Ann Arbor
Pillsbury, Chas. B.	Ypsilanti
Pollard, H. Marvin	Ann Arbor
Potter, Marcia	Ypsilanti
Power, Frank H.	M
Price, Helen F.	Ann Arbor
Prout, Gordon H.	Saline
Quirk, Edmund J.	Chelsea
Rague, Paul O.	M
Randolph, Theron G.	Ann Arbor
Raphael, Theophile	Ann Arbor
Ratliff, Rigidon K.	Ann Arbor
Ransom, Henry K.	Ann Arbor
Reynolds, Stephen	M
Riecker, H. H.	Ann Arbor
Riggs, Harold W.	Ann Arbor
Robb, David N.	Ypsilanti
Rosenbaum, Francis F.	Ann Arbor
Ross, Howard	M
Sacks, Wilma	Ann Arbor
Salon, Dayton D.	M
Schumacker, W. E.	Ann Arbor
Scott, Robt. R.	M
Scott, Wm. C.	M
Scurry, M. M.	M
Seivers, M. H.	Ann Arbor
Seime, Reuben I.	Ann Arbor
Sink, Emory W.	Ann Arbor
Smalley, Marianna	Ann Arbor
Smith, Joseph G.	M
Solis, Jeanne C.	(E) Ann Arbor
Stoddard, F. Jackson	Ann Arbor
Sturgis, C. C.	Ann Arbor
Sundwall, John	M
Teed, Reed W.	M
Thieme, E. Thurston	M
Towsley, Harry A.	M
Trimby, Robt. H.	Ann Arbor
Valk, Wm. L.	M
Vander Slice, David	Ann Arbor
Waggoner, R. W.	Ann Arbor
Waldron, Alexander M.	M
Wallace, J. B.	(R) Saline
Wanstrom, Ruth	Ann Arbor
Washburne, Chas. L.	Ann Arbor
Watson, Ernest Hamilton	Ann Arbor
Weller, Carl V.	Ann Arbor
Wellman, Waldron W.	Ypsilanti
Wessinger, J. A.	(E) Ann Arbor
Wile, Udo J.	M
Williams, Howard R.	Ann Arbor
Williamson, F. B.	Ypsilanti
Wilson, Frank N.	Ann Arbor
Wisdom, Inez R.	Ann Arbor
Woods, J. J.	Ypsilanti
Worth, Melissa H.	Ypsilanti
Wright, W. J.	Ypsilanti
Wylie, Wm. C.	Dexter
Yoder, O. R.	Ypsilanti

JOUR. MSMS

## ROSTER MSMS

### Wayne County

Abbott, Wm. E.	Detroit	Becker, Joseph W.	Detroit
Aaron, Charles D. (E)	Detroit	Becklein, C. L.	Detroit
Abrams, Harry M.	Detroit	Beckwitt, M. C.	M
Abramson, Max	Detroit	Bedell, A.	Detroit
Abruzzo, Anthony M.	M	Beer, Joseph F.	M
Adams, James R.	Dearborn	Beeuwkes, L. E.	M
Adelson, Sidney L.	M	Begle, H. L.	Detroit
Adler, Sidney	M	Behn, Claud W.	Detroit
Agins, Jacob	Detroit	Beigler, Sydney K.	Detroit
Agnelly, Edward J.	Detroit	Beitman, Max R.	M
Agnew, George H.	Detroit	Belanger, Ernest E.	M
Alderman, R. F.	Detroit	Belanger, Henry	Detroit
Aldrich, E. Gordon	Detroit	Belanger, Wm. George	M
Aldrich, Napier	M	Belknap, Warren F.	M
Allen, John V.	Lincoln Park	Bell, J. Kenner	Detroit
Alles, Russell W.	Detroit	Bell, Wm. M.	Detroit
Allison, Frank B.	Detroit	Bennett, Germany E.	Detroit
Allison, Herbert C.	Grosse Pte. Farms	Bennett, Harry B.	Detroit
Altman, Raphael	Detroit	Bennett, Zina B.	Detroit
Altshuler, Abraham M.	Detroit	Benson, C. D.	M
Altshuler, Ira M.	Detroit	Benson, Davis A.	M
Altshuler, Samuel S.	M	Benson, Virginia	Detroit
Amberg, Emil (E)	Detroit	Bentley, Frederick E.	Plymouth
Amos, Thomas G.	Detroit	Bentley, Neil I.	Detroit
Anderson, Bruce	Detroit	Berent, Morris S.	Detroit
Anderson, Gordon H.	M	Beresh, Louis	M
Anderson, J. O.	Detroit	Berge, Clarence A.	Detroit
Anderson, Walter L.	M	Bergman, Murray Stewart	Detroit
Anderson, Walter T.	Detroit	Bergo, Howard L.	M
Andries, Joseph H.	Detroit	Berke, Sydney S.	Detroit
Andries, Raymond C.	Detroit	Berkey, Wm. E.	Detroit
Ankley, J. W.	Detroit	Berlien, Ivan C.	M
Annessa, Dommenico M.	Detroit	Berman, Lawrence	Detroit
Anslow, E. Robt.	Detroit	Berman, Robert	Detroit
Appel, P. R.	Detroit	Berman, Sidney	M
Appelman, H. B.	Detroit	Bernard, Walter G.	Detroit
Archart, Burke W.	M	Bernbaum, Bernard	Detroit
Armstrong, Arthur G.	Detroit	Bernstein, Albert E.	Detroit
Arnold, Effie	Detroit	Bernstein, Samuel S.	M
Aronstan, Noah E.	Detroit	Berry, Joseph E.	Detroit
Arrington, Robyn J.	Detroit	Besancon, J. H.	M
Ascher, Meyer S.	M	Best, T. H. Edward	Detroit
Ashe, Stilson R.	Detroit	Bicknell, Edgar A.	M
*Ashley, James B.	M	Bicknell, Frank B.	M
Ashley, L. Byron	M	Bicknell, Nathan J.	Detroit
Ashton, F. B.	Highland Park	Biddle, Andrew P. (E)	Detroit
Asselin, J. L.	Detroit	Birch, John R.	M
Asselin, Regis F.	M	Birkelo, Carl C.	Detroit
Athay, Roland M.	Detroit	Bittker, I. Irving	Detroit
Atchison, Russell M.	Northville	Black, Perry S.	Detroit
Atler, Lawrence R.	Detroit	Blackford, Roger W.	Detroit
Atler, Leroy L.	M	Blain, Alexander W.	Detroit
Aubel, M. E.	Detroit	Blain, James H., Jr.	M
August, Harry E.	M	Blaine, Max	Detroit
Axelrod, Stanley H.	Detroit	Blair, K. E.	Detroit
Axelson, A. U.	Detroit	Blashill, James B.	M
Babcock, Kenneth B.	M	Blau, Morris H.	Detroit
Babcock, L. K.	Detroit	Bleier, Joseph	Detroit
Babcock, Myra E.	Detroit	Bloch, Abraham	Detroit
Babcock, W. W.	Detroit	Blodgett, Wm. E.	Detroit
Bach, Walter F.	Detroit	Blodgett, Wm. H.	M
Bachman, Morris E.	Detroit	Bloom, Arthur R.	Detroit
Bacon, Vinton A.	Detroit	Bloomer, Earl	Dearborn
Baer, George J.	Detroit	Blumenthal, Franz L.	Detroit
Baer, Raymond B.	Detroit	Boccaccio, John	M
Baeff, Michael A.	Detroit	Boccia, James J.	M
Bagley, Harry E.	M	Boddie, Arthur W.	Detroit
Bailey, Carl C.	M	Boddie, Lewis Franklin	Detroit
Bailey, Don A.	Detroit	Boehm, John D.	Detroit
Bailey, Louis J.	Detroit	Boell, Arthur F.	Detroit
Baker, Clarence	Detroit	Bogusz, Ladislaus	Eloise
Balaga, F. T.	Detroit	Bohn, Stephen	M
Balcerski, Matthew A.	Detroit	Boileau, Thornton I.	M
Ballard, Charles S.	Detroit	Boles, A. E.	M
Balser, Chas. W.	Detroit	Bookmyer, R. H.	Detroit
Baltz, James I.	Detroit	Bookstein, Abraham	M
Baranowski, A. W.	Detroit	Boutrous, Thomas A.	Detroit
Barone, Charles J.	Highland Park	Bovill, Edwin G.	M
Barrett, Wyman D.	Detroit	Bower, Franklin T.	Detroit
Baron, Wm. H.	Detroit	Bowers, Leo J.	Detroit
Bartemeier, Leo H.	Detroit	Bowman, Frank	Detroit
Barton, J. R.	Detroit	Boyd, John H.	Trenton
Bates, Gaylord	M	Brachman, D. S.	Detroit
Bates, Morton	Wayne	Bracken, Andrew H.	Dearborn
Bauer, Benedict J.	Detroit	Bradford, Henry	M
Bauer, A. Robt.	Detroit	Bradley, George	Detroit
Bauer, Lester Eugene	M	Bradshaw, Wm. H.	Detroit
Baumer, Moe	M	Braitman, Louis	Detroit
Banngarten, Elden C.	Detroit	Braley, W. N.	Detroit
Bayles, John G.	Detroit	Bramigk, F. W.	Detroit
Beach, Watson	Detroit	Brancheau, L. T.	M
Beam, A. Duane	M	Brando, Russell G.	Detroit
Beaton, Colin	M	Brandt, Edward L.	Detroit
Beattie, Robert	Detroit	Braun, Lionel	M
Beaver, Donald C.	Detroit	Brengle, Deane R.	Detroit
Beck, Eva F.	Eloise	Breon, Guy L.	Detroit
Becker, Abraham	M	Briegel, Walter A.	Detroit

\*Died in Military Service.

MAY, 1944

## ROSTER MSMS

Chalat, Jacob H.	Detroit
Chance, J. H.	Detroit
Chapman, Aaron L.	Detroit
Chapman, Everett L.	Detroit
Chapman, Paul T.	Detroit
Chapnick, H. A.	M
Chase, Clyde H.	Detroit
Chase, Harold F.	Detroit
Chatel, Arthur N.	Detroit
Chenik, Ferdinand	Detroit
Chester, W.	Detroit
Chesluk, H. M.	M
Childs, George Millard.	M
Chipman, W. A.	Detroit
Chittenden, Geo. E.	M
Chittick, Wm. R. (E.)	San Diego, Cal.
Christensen, C. A.	Dearborn
Christopher, James G.	Detroit
Crrouch, L. A.	Detroit
Cioffari, Mario S.	Detroit
Cipriani, Joseph E.	Detroit
Clark, Benjamin W.	M
Clark, C. M.	Detroit
Clark, Donald K.	San Francisco, Cal.
Clark, Donald V.	Detroit
Clark, George E. (E.)	Detroit
Clark, Harold E.	Detroit
Clark, Harry G.	Detroit
Clark, Harry L.	Detroit
Clark, Ronald E.	Detroit
Clarke, Emilie Arnold.	Detroit
Clarke, Geo. L.	Detroit
Clarke, Niles A.	M
Clarke, Norman E.	Detroit
Clayton, Paul A.	Wayne
Clifford, C. H.	Detroit
Clifford, John E.	Detroit
Clifford, Thos. P.	Detroit
Clippert, J. C. (E.)	Grosse Ile
Coan, Glenn L.	Wyandotte
Coates, Carl Amos.	Dearborn
Cobane, John H.	Detroit
Cochrane, Edgar G.	Detroit
Cohn, Daniel E.	M
Cohoe, Don A.	Detroit
Cole, Fred H.	Detroit
Cole, James E.	Detroit
Cole, Wyman C. C.	M
Coleman, Margarete W.	Detroit
Coleman, Wm. G.	Redford
Coll, Howard R.	Detroit
Collings, M. Raymond.	Detroit
Collins, Arthur D.	M
Collins, Edmund F.	Detroit
Collins, James D.	Detroit
Colvin, Leslie T.	Detroit
Colyer, Raymond G.	Detroit
Comstock, Lawrence	Trenton
Connelly, Basil L.	Detroit
Connelly, Richard C.	Detroit
Connally, Frank	Detroit
Connolly, John P.	Detroit
Conley, L. C. M.	Detroit
Connors, J. J.	Detroit
Conrad, E. R.	Detroit
Constable, Canute G.	Detroit
Cooksey, Warren B.	Detroit
Cook, James C.	M
Coolidge, M. Belle.	Grosse Pt. Park
Cooper, E. L.	Detroit
Cooper, James B.	Detroit
Corbeille, Catherine	Detroit
Cosiglia, Robt. P.	Detroit
Costello, Russell T.	Detroit
Cotruro, L. D.	Detroit
Cotton, S. O.	Detroit
Coucke, Henry O.	M
Coulter, Wm. J.	Detroit
Cowan, Wilfrid	Detroit
Cowen, Leon B.	Detroit
Coyne, Douglas R.	Detroit
Craig, Henry R.	Eloise
Crane, Langdon T.	Detroit
Cree, Walter J. (E.)	Palm Beach, Fla.
Crews, Thomas H.	Detroit
Croll, L. J.	M
Cross, Harold E.	Detroit
Crossen, Henry F.	Detroit
Croushore, J. E.	M
Cruikshank, Alexander	Detroit
Culp, Ormond	M
Curry, F. S.	Detroit
Curtis, Frank E.	Detroit
Cushing, Russell G.	Detroit
Cushman, H. P.	Detroit
Dale, Esther	Detroit
Dana, Harold M.	M
Danforth, J. C.	Detroit
Danforth, M. E.	Detroit
Daniels, L. E.	Detroit
Darling, Milton A.	Detroit
Darpin, Peter H.	Detroit
Davidson, Harry O.	M
Davies, Thos. S.	Grosse Pte.
Davies, Windsor S.	M
Davis, Egbert F.	Detroit
Davis, George H.	M
Davis, Lindon Lee.	M
Dawson, F. E.	Detroit
Dawson, W. A.	Inkster
Day, J. Claude.	M
Defever, Cyril R.	M
Defnet, Wm. A.	Detroit
DeGroat, Albert	M
Delbert, Stewart G.	M
Demaray, John F.	Detroit
Dempster, James H.	Detroit
DeNike, A. James	Detroit
Denis, George M.	Detroit
Denison, Louis L.	Detroit
DePonio, Sylvester A.	Detroit
Derby, Arthur P.	Detroit
Derleth, Paul E.	M
Despeler, Ray E.	Detroit
DeTomasi, Rome Q.	Detroit
Dibble, Harry F.	Detroit
Dickman, Harry M.	M
Dickson, D. R.	Detroit
Diebel, Nelson W.	Detroit
Diebel, Wm. H.	Detroit
Dietzel, H. O.	Detroit
Dill, Hugh L.	Detroit
Dill, J. Lewis	Detroit
DiLoreto, Panfilo Camillo	M
Dittmer, Edwin	Detroit
Dixon, Fred W.	M
Dixon, Ray S.	Detroit
Dodds, John C.	Detroit
Dodenhoff, C. F.	Detroit
Doerr, Louis E.	M
Dolega, Stanley F.	M
Dolman, E. Nesbitt.	Detroit
Domzalski, C. A.	Detroit
Donald, Douglas	M
Donald, Wm. M. (E.)	Detroit
Donovan, Daniel R., Jr.	Detroit
Dorsey, John M.	Detroit
Doty, Chester A.	Detroit
Doub, Howard P.	Detroit
Douglas, Bruce H.	Detroit
Douglas, Clare L.	M
Dovitz, Benj. W.	Detroit
Dow, Roy E.	Carlisle Barracks, Pa.
Dowdle, Edward	Detroit
Dowling, H. E.	M
Downer, Ira G.	Detroit
Doyle, Geo. H.	Detroit
Drake, Ellet H.	M
Drake, James J.	Detroit
Draves, Edward F.	Detroit
Drews, Robt. S.	Detroit
Drinkhaus, H. I.	Detroit
Droock, Victor	Detroit
Dubin, Joseph J.	Detroit
Dubnoe, Aaron	Detroit
Dubois, Paul W.	Detroit
Dubpernell, Karl	Detroit
Dubpernell, Martin S.	Detroit
Ducey, Edward F.	M
Dudek, John J.	Wyandotte
Duffy, Edward A.	Detroit
Dundas, E. M.	Detroit
Dunlap, Henry A.	Detroit
Dunn, Cornelius E.	Detroit
Durocher, Edmund J.	Ecorse
Durocher, Normand E.	M
Dutchess, Charles E.	Detroit
Dwaihy, Paul	Detroit
Dwyer, Francis	M
Dysarz, T. T.	Detroit
Dziuba, John J.	M
Eades, Charles C.	M
Eakins, Frederick J.	Dearborn
Eaton, Crosby D.	Detroit
Edgar, Russell G.	Detroit
Eder, Joseph R.	M
Eder, Samuel J.	Detroit
Edgar, Irving I.	Detroit
Edmonds, W. N.	Detroit
Edwards, Gilbert L.	Detroit
Edwards, J. W.	Detroit
Eisman, Clarence H.	Detroit
Elliott, Wm. G.	Detroit
Ellis, Seth W.	M
Eividge, Robt. J.	Detroit
Emmert, H. C.	Detroit
Engle, Earl H.	M
Ensign, Dwight C.	Detroit
Ensing, Osborn	Detroit
Epstein, S. G.	M
Erickson, Milton H.	Eloise
Erkfitz, Arthur W.	Detroit
Eschbach, Jos. W.	M
Estabrook, Bert U.	Detroit
Ettinger, Clayton J.	Detroit
Evans, Jos. M.	Detroit
Evans, Leland S.	Redford
Evans, Wm. A., Jr.	M
Ewing, C. H.	M
Fair, B. B.	Detroit
Falick, Mordecai L.	M
Falk, I. E.	Detroit
Fallis, L. S.	Detroit
Fandrich, Theodore	M
Farbman, Aaron A.	Detroit
Farbman, Simon S.	Detroit
Farney, Jacob P.	Detroit
Fauman, David H.	Detroit
Faunce, Sherman P.	Detroit
Fay, George E.	Detroit
Felcyn, W. Geo.	Detroit
Feldstein, Martin Z.	M
Fellers, Ray L.	Detroit
Fellman, Abraham R.	Detroit
Fenech, Harold B.	M
Fenner, Wm. A.	Detroit
Fenton, E. H.	Detroit
Fenton, Meryl M.	M
Fenton, Russell F.	Detroit
Fenton, Stanley C.	Detroit
Ferguson, Franklin F.	M
Ferrera, Louis V.	M
Ferrara, Virginia M.	Detroit
Fettig, Carl A.	Detroit
Field, G. S. (E)	Detroit
Finch, Alvis D.	Detroit
Fine, Edward	Detroit
Fischer, Frederick J.	M
Fischer, Edward F.	Dearborn
Fisher, Geo. S.	M
Fisher, O. O.	Detroit
Fisher, R. L.	Detroit
Fitzgerald, E. W.	M
Fitzgerald, James M.	M
Flaherty, H. J.	Detroit
Flaherty, N. W.	M
Flaherty, S. A.	Detroit
Fleming, L. N.	Detroit
Flora, Wm. R.	M
Flower, J. A.	Detroit
Fogt, H. E.	Detroit
Fogt, Robt. G.	Detroit
Foley, Hugh S.	Dearborn
Font, Anthony J.	Detroit
Foote, James A.	Lincoln Park
Ford, F. A.	Detroit
Ford, Geo. A.	Detroit
Ford, Sylvester	M
Ford, Walter D.	Detroit
Fordell, F. S.	Detroit
Forrester, Alex W.	Detroit
Forsythe, John R.	M
Foster, E. Bruce	M
Foster, Daniel P.	Detroit
Foster, Linus J.	Detroit
Foster, Owen C.	Detroit
Foster, Wm. L.	Detroit
Foster, W. M.	Detroit
Fox, Morris E.	M
Fraiberg, Paul L.	Detroit
Franjac, M. J.	Dearborn
Franzen, Nils A.	Detroit
Fraser, E. E.	Detroit
Fraser, Harvey E.	M
Fraser, Herman F.	Detroit
Frazer, Mary Margaret	Detroit
Freedman, John	M
Freedman, Milton	Detroit
Freeman, D. K.	Detroit
Freeman, Mabel	Detroit
Freeman, Thelma	Detroit
Freese, John A.	Detroit
Fremont, Joseph C.	M
Fried, Bernard H.	M
Friedlaender, Alex S.	Detroit
Friedman, David	Detroit
Friedman, I. H.	Detroit
Frink, Norman W.	Detroit
Frost, Lyle	Detroit
Frostic, Wm. D.	M
Frothingham, Geo. E. (E)	Detroit
Fuerbringer, Ralph O.	Detroit
Fuller, Allan C.	M
Fuller, Hugh M.	M
Gaba, Howard	M
Gabe, Sigmund	M
Gaberman, David B.	Detroit
Gaffney, J. Mitchell	Detroit

JOUR. MSMS

## ROSTER MSMS

Detroit	Galantowicz, H. C.	Detroit	Gutow, Benj. R.	M	Holmes, A. W.	Detroit
.....M	Galdonyi, Laslo	Detroit	Haefele, Leslie P.	Garden City	Holt, Henry T.	Detroit
Eloise	Galdonyi, Nicholas	Detroit	Hale, Arthur S.	Detroit	Holstein, A. P.	M
Detroit	Galerneau, D. B.	Center Line	Hall, Arche C.	Detroit	Hohhart, Fred L.	Detroit
.....M	Gamble, Parker B.	Detroit	Hall, E. Walter.	Detroit	Honor, Wm. H.	Wyandotte
Detroit	Gannan, Arthur M.	Detroit	Hall, Ralph E.	Detroit	Hooker, Donald H.	M
Detroit	Ganschow, John H.	Detroit	Hall, Robt. J.	Detroit	Hookey, J. A.	M
Detroit	Gariepy, L. J.	Detroit	Haluska, Jos. A.	Detroit	Hooper, Norman L.	Detroit
Detroit	Garner, Howard B. (E)	Detroit	H'Amada, Norman K.	Detroit	Hoopes, Benj. F.	M
Redford	Gaston, Herbert B.	M	Hamburger, A. C.	M	Hoops, George B.	Detroit
.....M	Gates, Nathaniel H.	Detroit	Hamil, Brenton M.	Detroit	Hopkins, J. E.	Detroit
Detroit	Gaynor, Alex	Detroit	Hamilton, Norman C.	Detroit	Horan, Thomas	M
.....M	Gehring, Harold W.	Detroit	Hamilton, Stewart	Detroit	Horkins, Harold A.	Detroit
Detroit	Gehrke, August E.	Detroit	Hamilton, Wm.	Detroit	Horny, Hugo	M
Detroit	Geib, Ledru O.	Detroit	Hamilton, Wm. F.	Detroit	Horton, Reece H.	Detroit
.....M	Geib, Wayne A.	M	Hammer, Charles A.	Detroit	Horvath, Louis O.	Detroit
Detroit	Geiter, Clyde W.	Detroit	Hammer, Edwin J.	Detroit	Horwitz, John B.	M
Detroit	Geitz, Wm. A.	Detroit	Hammer, Howard J.	M	Host, Lawrence N.	Detroit
Detroit	Gellert, I. S.	Detroit	Hammond, A. E.	Detroit	Hotchkiss, Loris M.	Farmington
Detroit	Gemeroy, J. C.	Detroit	Hammond, James L.	Inkster	Howard, Austin Z.	Detroit
Detroit	George, A. W.	Detroit	Hanna, Carl	M	Howard, Philip J.	Detroit
Detroit	Gerondale, E. J.	Detroit	Hanna, E. Howard	Detroit	Howell, Bert F.	Detroit
Detroit	Gibson, James C. (E)	Detroit	Hanna, Samuel C.	Detroit	Howes, Willard B.	Detroit
Detroit	Gigante, Nicola	Detroit	Hansen, Frederick E.	Detroit	Howlett, Howard T.	Detroit
.....M	Gignac, Arthur L.	Detroit	Hanser, Joshua	Detroit	Hromadko, Louis	Detroit
Detroit	Gilbert, Harold R.	Wyandotte	Hanson, Frederick N.	M	Hubbard, John P.	Detroit
.....M	Gilbert, Roy S.	Detroit	Harelak, E. W.	Detroit	Hubbard, Ralph G.	Detroit
Detroit	Gillman, R. W. (E)	Detroit	Hardstaff, R. John	Detroit	Hudson, A. Willis	Detroit
Detroit	Gingold, Samuel M.	M	Hardy, George C.	Detroit	Hudson, J. Stewart	Grosse Pte.
Detroit	Gingrich, Wayne A.	M	Harley, Louis M.	Detroit	Hudson, Wm. A.	Detroit
.....M	Ginsberg, Harold I.	M	Harm, W. B.	Detroit	Huegli, Wilfrid A.	M
Detroit	Githin, Charles	M	Harper, Jesse T.	M	Huff, Reginald G.	Wayne
.....M	Gittins, Perry C.	Detroit	Harrell, Voss	Detroit	Hughes, Ray W.	Detroit
Detroit	Glasgow, Gordon K.	Detroit	Harris, Harold H.	M	Hull, L. W.	Detroit
.....M	Glassman, Samuel	Detroit	Harris, Ivor David	Detroit	Hunt, T. H.	Detroit
Detroit	Glazer, Walter S.	Detroit	Harris, Landy E.	Detroit	Hunt, Verne G.	Detroit
Detroit	Gleason, John R.	Detroit	Harrison, Wesley	Detroit	Hunter, C. M.	Detroit
Detroit	Glees, J. L.	Grosse Pte. Farms	Hart, Charles E.	M	Hunter, Elmer N.	Detroit
Detroit	Glemet, Raymond B.	Detroit	Hart, J. Clarence	M	Husband, Chas. W.	Detroit
.....M	Glickman, L. Grant	M	Hartgraves, Hallie	Detroit	Hyatt, Jarvis M.	M
Dearborn	Glowaki, B. F.	Detroit	Hartman, F. W.	Detroit	Hyde, F. W.	Detroit
.....M	Gmeiner, Clarence C.	Detroit	Hartmann, W. B.	Detroit	Iacobell, Peter H.	M
Detroit	Goerke, Elmer A.	Romulus	Hartzell, John B.	M	Ignatius, A. A.	Detroit
.....M	Goetz, Angus G.	M	Hasley, Clyde K.	Detroit	Ihle, Lyman E.	M
Detroit	Goins, Wm. F.	Detroit	Hasley, Daniel E.	Detroit	Insley, Stanley W.	Detroit
.....M	Goldberg, Arthur	Detroit	Hastings, Orville J.	Detroit	Irvin, Earle Albert	Detroit
Detroit	Goldberg, Harry H.	Detroit	Hause, Glen E.	M	Irwin, W. A.	Detroit
.....M	Goldberg, Nathan H.	Detroit	Hauser, I. Jerome	M	Israel, Barney B.	M
Detroit	Goldin, M. I.	M	Hauser, John E.	Detroit	Isaacs, Joseph C.	Detroit
Detroit	Goldman, Perry	M	Havers, Howard	Detroit	Isaacson, Arthur	Detroit
.....M	Goldsmith, J. D.	Detroit	Hawken, Wm. C.	Detroit	Ivkovich, Peter	M
Detroit	Goldstone, R. R.	Detroit	Hawkins, James W.	Detroit	Jacobson, Samuel D.	Eloise
Detroit	Gollman, Maurice D.	M	Hayes, Joseph D.	Detroit	Jacoby, Myron D.	Detroit
Detroit	Gonne, Wm. S.	M	Heath, Leonard P.	M	Jaeger, Grove A.	Detroit
Detroit	Good, Wm. H.	M	Heath, Parker	Detroit	Jaeger, Julius P.	Detroit
Detroit	Goodrich, B. E.	M	Heavner, L. E.	M	Jaekel, C. N.	Detroit
Detroit	Bordon, Wm. H.	M	Hedges, Frank W.	Detroit	Jaffar, Donald J.	Detroit
Lincoln Park	*Goerelick, Harry S.	Detroit	Hedrick, Donald W.	Detroit	Jaffe, J. L.	Detroit
Detroit	Goins, Wm. F.	Detroit	Heenan, T. H.	Detroit	Jaffe, Jacob	Detroit
.....M	Gorelick, Martin J.	M	Heideman, Louis	M	Jaffe, Louis	M
Detroit	Gorning, Raymond P.	Detroit	Heldt, Thomas J.	Detroit	Janicki, Natalia J.	Eloise
Detroit	Gottschalk, Fred W.	Detroit	Heller, C. George	Detroit	Jahsman, Wm. E.	Detroit
Detroit	Gould, S. Emanuel	Eloise	Hendelman, Manuel H.	Detroit	James, L. Mae	Detroit
Detroit	Goux, Raymond S.	Detroit	Henderson, A. B.	M	James, Richard G.	Detroit
.....M	Grace, Joseph M.	Eloise	Henderson, Harold	Detroit	Jamieson, Robt. C.	Detroit
Detroit	Graham, Julius A.	Detroit	Henderson, J. L.	Detroit	Jamieson, Thomas J.	Lincoln Park
Detroit	Grain, Gerald O.	Detroit	Henderson, Leslie T.	Detroit	Jarre, Hans A.	Detroit
Detroit	Grajewski, Leo F.	Detroit	Henderson, Wm. E.	Detroit	Jarzynka, Frank J.	Dearborn
Detroit	Gramley, Wm.	Detroit	Henderson, Wm. W.	M	Jasion, Lawrence J.	M
Detroit	Granger, Francis L.	Detroit	Henig, Fred	M	Jend, Wm. J.	Detroit
Detroit	Grant, Heman E.	Detroit	Henrich, L. E.	Detroit	Jenkins, E. A.	M
.....M	Gratton, Henri L.	Detroit	Herkimer, Dan R.	M	Jenne, Byron H.	Detroit
Detroit	Gratzek, Frank R.	Detroit	Herrold, Rose E.	Detroit	Jennings, Alpheus F.	Detroit
Detroit	Gravelle, L. J.	Detroit	Herschelmann, Roy F.	M	Jennings, Robt. M.	M
Detroit	Green, Ellis R.	Detroit	Hershey, Lynn N.	Detroit	Jentgen, Chas. J.	Detroit
Detroit	Green, Lewis	Detroit	Hewitt, Leland V.	Detroit	Jentgen, L. G.	Detroit
.....M	Green, Louis M.	M	Hewitt, Robt. S.	M	Jewell, F. C.	Detroit
Detroit	Green, Simpson W.	Detroit	Hayner, Stanley A.	Detroit	Jocz, Marion W.	Detroit
.....M	Green, Sydney H.	M	Hickey, Joseph	Detroit	Jodar, E. O.	Detroit
Detroit	Greenberg, Julius J.	M	Higbee, Arthur L.	Detroit	John, Hubert R.	Detroit
Detroit	Greenberg, Morris Z.	M	Hildebrant, Hugh R.	Detroit	Johnson, Homer L.	Detroit
Detroit	Greene, John B.	Detroit	Hileman, Lee	Ecorse	Johnson, Neumon	Detroit
Detroit	Greenidge, Robt.	Detroit	Hillenbrand, Alfred E.	M	Johnson, Ralph A.	Detroit
Detroit	Greenlee, Wm. Tate	Detroit	Hiller, Glenn I.	Detroit	Johnson, R. M.	Detroit
Detroit	Greiner, Bert A.	Detroit	Hilton, Wm. E.	Detroit	Johnson, V. P.	Detroit
.....M	Grekin, Joseph	Detroit	Hinko, Edward N.	Eloise	Johnson, V. C.	Detroit
Detroit	Grekin, Samuel L.	Detroit	Hipp, Wm.	Detroit	Johnston, C. G.	M
Detroit	Griffith, Arthur J.	Detroit	Hirschfeld, John W.	Detroit	Johnston, Everett V.	Detroit
Detroit	Grillo, S. Phillip.	Belleville	Hirschman, L. J.	Detroit	Johnston, J. A.	Detroit
Detroit	Grimaldi, G. J.	M	Hochman, Morton M.	Detroit	Johnston, John L.	Detroit
Detroit	Grob, Otto	Detroit	Hodges, Roy W.	Detroit	Johnston, Wm. E.	Detroit
Detroit	Gronow, A. A.	Detroit	Hodgkinson, C. P.	M	Johnstone, B. I.	Detroit
.....M	Grossman, Sol.	M	Hodoski, Frank J.	Detroit	Joinville, E. V.	Detroit
Detroit	Gruber, T. K.	Eloise	Hoenig, Andrew L.	Detroit	Jones, Arthur J.	Detroit
Detroit	Gruhzit, Oswald M.	Grosse Pte. Shores	Hoffman, E. S.	Detroit	Jones, Adrian R.	Detroit
Detroit	Guimaraes, A. S.	Dearborn	Hoffman, Henry A.	M	Jones, Edna M.	Detroit
.....M	Gurdjian, E. S.	Detroit	Hoffman, Martin H.	Detroit	Jones, H. C.	M
Detroit	Gruman, Ben G.	M	Holcomb, August A.	Northville	Jones, L. Faunt.	Detroit
Detroit	—	—	Hollander, A. J.	Detroit	Jones, Roy D.	Detroit
Detroit	—	—	Hollis, Henry B.	Detroit	Jonikaitis, Joseph J.	Detroit
Detroit	—	—	Holman, Herbert H.	M		

\*Died in Military Service.

## ROSTER MSMS

Joyce, Stanley J.	M	Krohn, Albert H.	Detroit
Judd, C. Hollister	Detroit	Krynicki, Francis X.	Detroit
Julian, Benj.	M	Kubanek, Joseph L.	Eloise
Jurow, Harry N.	Detroit	Kucmierz, Francis S.	M
Kahn, Wm. W.	Detroit	Kuhn, Albert Arthur	M
Kallet, Herbert I.	Detroit	Kuhn, Richard F.	M
Kallman, R. Robt.	M	Kulaski, Chester H.	Detroit
Kaminski, L. R.	Detroit	Kullman, Harold J.	M
Kaminski, Zeno L.	Detroit	Kurcz, J. A.	M
Kamperman, George A.	Detroit	Kurtz, I. J.	Detroit
Kanter, Herman	M	Kwasiborski, S. A.	Wyandotte
Kapetansky, A. J.	Detroit	Laberge, James M.	M
Kapetansky, N. J.	Detroit	LaBine, Alfred C.	Detroit
Kaplita, Walter A.	M	LaCore, Ivan	M
Karr, Herbert S.	Detroit	LaFerte, Alfred D.	Detroit
Kasaback, V. Y.	Detroit	Laird, Robt.	Detroit
Kass, J. B.	Detroit	Lakoff, Chas.	Detroit
Kates, Simon C.	Detroit	Lamberson, Frank A.	Detroit
Katzman, I. S.	Detroit	La Marche, N. O.	Detroit
Kauffman, Wm.	M	Lampman, H. H.	Detroit
Kaump, Donald H.	Detroit	Landers, M. B.	Detroit
Kay, Edward W.	Hamtramck	Landers, M. B., Jr.	Detroit
Kay, Harry H.	M	Lang, Leonard W.	Detroit
Kazdan, Louis	M	Lange, Anthony H.	Detroit
Kazdan, Morris A.	M	Lange, Wm. A.	M
Keane, Wm. E.	Detroit	Laning, George M.	Detroit
Kearns, Hubert J.	Detroit	Lansky, Mandell	M
Keating, Thomas F.	Detroit	Lapham, Fred E.	M
Keene, Clifford H.	M	Larsson, Bror H.	Detroit
Kehoe, Henry J.	E	Lash, Michael W.	Detroit
Kelly, Edward W.	Detroit	Lasley, James W.	Detroit
Kemler, W. J.	Ecorse	Lassaline, S. J.	Detroit
Kennary, James M.	Detroit	Lathrop, Philip L.	Detroit
Kennedy, Chas. S.	Detroit	Laub, Stanley V.	M
Kennedy, L. F.	Detroit	Lauppe, Edward H.	Detroit
Kennedy, Robt. B.	Detroit	Lauppe, F. A.	M
Kenning, John C.	Beverly Hills, Cal.	Law, John H.	Detroit
Kenyon, Fanny H.	Detroit	Lawrence Wm. C.	Detroit
Kern, W. H.	Garden City	Lazar, Morton R.	M
Kernkamp, Ralph	Detroit	Leach, David	M
Kernick, Melvin O.	M	Leacock, Robt. C.	Detroit
Kersten, Armand G.	Detroit	Leader, L. R.	Detroit
Kersten, Werner	Detroit	Leaver, L. Ross	Detroit
Keshishian, Sarkis K.	Detroit	Lickie, Geo. C.	Detroit
Keyes, Eugene	Dearborn	Ledwidge, Patrick L.	Detroit
Keyes, John W.	M	Lee, Harry E.	Detroit
Kibzey, Ambrose T.	Detroit	LeGalle, Geo. M.	M
Kidner, Fred C.	Detroit	Lehman, Wm. L.	M
Kimball, David C.	M	Leibinger, H. R.	Detroit
Kimberlin, Kenneth K.	M	Leipsitz, Louis S.	M
King, Edward D.	Detroit	Leiser, Rudolf	Eloise
King, Melbourne, J.	M	Leithauer, D. J.	Detroit
Kingswood, Roy C.	Detroit	Leland, Sol.	M
Kirchner, Augustus	Detroit	Lemley, Clark	Detroit
Kirker, J. G.	Detroit	Lemmon, Charles E.	M
Kirschbaum, Harry M.	Detroit	Lemmon, Clarence W.	River Rouge
Klebbau, Paul	Detroit	Lentine, James J.	M
Klein, Wm.	Detroit	Lenz, Willard	Grosse Pointe
Kliger, David	Detroit	Lepley, Fred O.	Detroit
Kline, Lewis LeRoy	Detroit	Lerman, S. E.	Detroit
Kline, Starr L.	Detroit	Leschobier, Alex W.	Grosse Pointe
Kloepfel, C. S.	Detroit	L'Esperance, Simon P.	Detroit
Klosowski, Joseph	Detroit	Leszynski, J. S.	Detroit
Klote, M. D.	Detroit	Leucutia, Traian	Detroit
Knaggs, Charles W.	Grosse Pte.	Levant, Arthur B.	M
Knaggs, Earl J.	M	Levin, David M.	M
Knapp, Byron	M	Levin, Michael M.	M
Knapp, Floyd	Detroit	Levin, Samuel J.	M
Knoblock, Edmund J.	Detroit	Levine, Sidney S.	Detroit
Knoch, Hubert S.	M	Levitt, Nathan	Detroit
Knox, Ross M.	Ecorse	Levy, Marvin B.	Detroit
Koebel, R. H.	Detroit	Lewis, Charles T.	Detroit
Koerber, Edward J.	Detroit	Lewis, L. A.	Detroit
Koessler, George L.	Detroit	Lewis, J. Hugh	M
Kohn, A. Max	M	Lewis, Wilfrid John	M
Kohn, M. E.	Detroit	Libbrecht, Robt. V.	Dearborn
Kokowicz, Raymond J.	M	Lichter, M. L.	M
Kolasa, W. B.	Detroit	Lichtwardt, Hartman A.	Detroit
Kopel, Joseph O.	Detroit	Lieberman, B. L.	Detroit
Korby, George J.	M	Liddicoat, A. G.	Detroit
Kosanovic, Frederick	M	Lightbody, James J.	Detroit
Koss, Frank R.	M	Lignell, Rudolph	Detroit
Kossayda, Adam W.	M	Lilly, Charles J.	Detroit
Koster, Koert	Detroit	Lilly, Vernon S.	Detroit
Kovach, Emery P.	Detroit	Linton, James R.	Eloise
Kovan, Dennis D.	M	Lipinski, Stanley L.	Detroit
Koven, Abraham	Detroit	Lipkin, Ezra	Detroit
Koslinski, Anthony E.	M	Lipschutz, Louis S.	M
Kraft, Raymond B.	Detroit	Livingston, George D.	M
Kraft, Ruth M.	Detroit	Lockwood, Bruce C.	Detroit
Krass, Edward W.	M	Lofstrom, James E.	M
Krebs, Wm. T.	Detroit	Long, Earle C.	Detroit
Kretzschmar, C. A.	Detroit	Long, John J.	Detroit
Krieg, Earl G.	Detroit	Loranger, C. B.	Grosse Pointe
Krieger, Harley L.	Detroit	Loranger, Guy L.	M
Kreinbring, George E.	Detroit	Lord, Herman M.	M
Kritchman, M. J.	M	Lorber, Joseph H.	M
Kroha, Lawrence	Detroit	Lorentzen, Edwin H.	Detroit
		Lovas, W. S.	M
		Lovell, B. K.	Detroit

ROSTER MSMS

Detroit	McDonald, Peter W.	M	Nagel, Oscar	M
Detroit	McGarvah, A. W.	Detroit	Nagle, John W.	Wyandotte
Detroit	McGarvah, Jos. A.	Detroit	Naud, Henry J.	Detroit
Detroit	McGee, Chas. Joseph	Eloise	Nawatka, E. E.	Detroit
Detroit	McGillicuddy, W. E.	Detroit	Naylor, A. E.	Detroit
.... M	McGloughlin, Nicholas D.	Wyandotte	Naylor, Arthur H.	Detroit
Detroit	McGough, Joseph M.	M	Neeb, Walter G.	M
Detroit	McGraw, Arthur B.	M	Nelson, Harry M.	Detroit
Detroit	McGuire, Ruth M.	Detroit	Nelson, Victor E.	M
Detroit	McIntosh, W. V.	Detroit	Neumann, Arthur J.	Detroit
Detroit	McKean, G. Thomas	M	Newbarr, Arthur A.	Detroit
Detroit	McKean, Richard M.	M	Newcomer, Sheldon R.	Detroit
.... M	McKenna, Chas. J.	M	Newman, Max Karl.	Detroit
Detroit	McKhann, C. F.	Detroit	Nielsen, Aage E.	M
Detroit	McKinnon, John D.	Detroit	Nichamkin, Samuel J.	M
Detroit	McLane, Harriet E.	Detroit	Nickels, Albert W.	M
.... M	McLean, Don W.	M	Nickerson, Dean	M
Detroit	McLean, Harold G.	Detroit	Nigro, Norman D.	M
Detroit	McMahon, Gerald H.	Detroit	Nill, John B.	Detroit
Detroit	McMehen, Chas. E.	Berkeley	Nill, Wm. F.	Detroit
Detroit	McPherson, R. J.	Detroit	Nixdorf, Wallace B.	Detroit
.... M	McQuiggan, Mark R.	Detroit	Noer, Rudolf J.	M
Detroit	McQuiggan, Paul	M	Nolting, Wilfred S.	M
Detroit	McRae, Donald H.	Detroit	Norconk, A. A.	M
Detroit	Mead, John	Detroit	Norcott, Edith S.	Detroit
Detroit	Meader, F. M.	Detroit	Norris, Edgar H.	Detroit
Detroit	Meek, Stuart F.	Detroit	Northrop, Arthur K.	Detroit
Detroit	Meinecke, H. A.	Detroit	Norton, Charles S.	Detroit
Detroit	Mellen, Hyman S.	Detroit	Noth, Paul H.	Grosse Pte. Farms
Detroit	Melnik, Maxim P.	Detroit	Novy, R. L.	Detroit
Detroit	Menagh, Frank R.	Detroit	Nowicki, Jos. A.	Detroit
Detroit	Mendelsohn, R. J.	Detroit	O'Brien, E. J.	Detroit
Detroit	Merkel, Charles C.	Grosse Pte.	O'Brien, G. M.	Detroit
Detroit	Merrill, Wm. O.	Detroit	O'Donnell, David H. (E)	Detroit
Detroit	Merriman, K. S.	Detroit	O'Donnell, Dayton H.	M
Detroit	Merritt, Earl G.	Detroit	Ohmart, Galen B.	Detroit
Detroit	Metzger, Harry C.	Detroit	O'Hora, James T.	Detroit
Detroit	Meyer, Ruben	Detroit	Ohrt, Harold F.	Detroit
Detroit	Meyers, M. P.	M	Olenikoff, Alex	M
Detroit	Meyers, Solomon G.	M	Olechowski, Leo W.	M
.... M	Miley, H. H.	Detroit	Olmsted, Wm. R.	Detroit
Detroit	Miller, Daniel H.	Detroit	Olnay, H. E.	Detroit
Detroit	Miller, Harry A.	M	Oman, Cyrus F.	Detroit
Detroit	Miller, Hazen L.	Detroit	Oppenheim, J. M.	M
Detroit	Miller, Karl	M	Oppenheim, Milton M.	Highland Park
Detroit	Miller, Maurice P.	Trenton	Organ, Fred W.	Detroit
Detroit	Miller, Myron H.	Detroit	Ormond, John K.	Detroit
Detroit	Miller, T. H.	M	Orecklin, L.	Detroit
.... M	Miller, Wm. Ernest	Detroit	O'Rourke, Paul V.	Detroit
Detroit	Mills, Clinton C.	M	O'Rourke, R. M.	Detroit
Detroit	Mills, Georgia V.	Detroit	Osius, Eugene	M
Detroit	Mintz, Edward I.	Detroit	Ott, Harold A.	M
Detroit	Miral, Solomon P.	Detroit	Ottaway, John P.	M
Detroit	Mishelevich, Sophie	Detroit	Owen, Clarence I.	M
Detroit	Mitchell, C. Leslie	Detroit	Owen, Samuel H. C.	Detroit
Detroit	Mitchell, Gertrude F.	Detroit	Palmer, Alice	Detroit
Detroit	Mitchell, W. Bede	M	Palmer, R. Johnston	Detroit
Detroit	Moehlig, Robert C.	Detroit	Pangburn, L. E.	Detroit
Detroit	Moisides, V. P.	Detroit	Panzner, Edward J.	Detroit
Detroit	Moll, Clarence D.	Detroit	Parker, Albert R.	Wayne
Detroit	Molner, Joseph G.	Detroit	Parker, Benj. R.	M
Detroit	Moloney, J. Clark	M	Parker, Walter R. (E)	Detroit
Detroit	Mond, Edward	Detroit	Parkinson, Doris	Detroit
Detroit	Monfort, Willard	Detroit	Parr, R. W.	Detroit
Detroit	Montgomery, John C.	Detroit	Parson, John P.	Grosse Pte. Park
Detroit	Montante, Jos. R.	M	Pasternacki, Norbert T.	Detroit
Detroit	Moore, Doris Sanders	Detroit	Paterson, Walter G.	Detroit
Detroit	Moore, James A.	Detroit	Patton, Henry S.	M
Detroit	Moore, Mildridge B.	Detroit	Pawlowski, Jerome	Detroit
Detroit	Morand, Louis J.	Detroit	Paysner, Harry A.	Detroit
Detroit	Morgan, Donald Nye	M	Peabody, Chas. Wm.	Detroit
.... M	Moriarity, George	Detroit	Peacock, L. W.	Highland Park
Detroit	Moritz, H. C.	Detroit	Pearse, Harry A.	Detroit
Detroit	Morley, Harold V.	M	Peiggs, George F.	M
Detroit	Morley, James A.	Detroit	Peirce, Howard W.	Detroit
Detroit	Morrison, G. W.	Detroit	Penberthy, G. C.	M
Detroit	Moroun, S. J.	Detroit	Pendy, John M.	M
Detroit	Morris, Harold L.	Detroit	Pensler, Meyer	M
Detroit	Morrison, Marjorie G. E.	Detroit	Pequegnot, Chas. F.	Detroit
Detroit	Morse, Plinn F.	Detroit	Perdue, Grace M.	Detroit
Detroit	Morton, David G.	M	Perkin, Frank S.	M
Detroit	Morton, John B.	Detroit	Perkins, Ralph A.	Grosse Pte.
Detroit	Mosee, W. Jones	Detroit	Perlis, H. L.	Detroit
Detroit	Mosen, Max M.	Detroit	Perry, Alvin LaForge	M
.... M	Moss, E. B.	Detroit	Peterman, Earl A.	Detroit
Detroit	Moss, Nathan H.	Detroit	Petix, Samuel C.	Detroit
Detroit	Mott, Carlin P.	Detroit	Pickard, O. W.	Detroit
.... M	Muelenhagen, Walter J.	Detroit	Pierce, Frank L.	Detroit
Detroit	Munson, F. T.	Detroit	Pierson, Max J.	Detroit
Detroit	Muntyan, Andrew	Detroit	Pietraszewski, A. W.	Detroit
.... M	Murphy, D. J.	M	Pinckard, Karl G.	Dearborn
Detroit	Murphy, Frank J.	M	Pink, Rose M.	Detroit
Detroit	Murphy, John M.	M	Pinney, Lyman J.	Detroit
Detroit	Murphy, Scipio G.	Detroit	Pino, Ralph H.	Detroit
Detroit	Murphy, W. M.	Detroit	Piper, Clark C.	Detroit
Detroit	Murray, George M.	Detroit	Plaggemeyer, H. W.	Detroit
Detroit	Murray, Wm. A.	Detroit	Pliskew, Harold	M
Detroit	Muske, Paul H.	M	Podezwa, J. W.	M
Detroit	Myers, George P.	Detroit	Pollock, John J.	Detroit
Detroit	Myers, Gordon B.	Detroit		

## ROSTER MSMS

Rothstein, Hyman	M	
Rotharius, E. M.	Detroit	
Rothbart, H. B.	Detroit	
Rothman, Emil D.	Detroit	
Rottenberg, Leon	M	
Rowda, Michael S.	Detroit	
Rowell, Robt. C.	Eloise	
Rowell, Wilfred J.	M	
Rubright, LeRoy W.	M	
Rucker, Julian J.	Detroit	
Rueger, Milton J.	M	
Rueger, Ralph C.	Detroit	
Runge, Edward F.	Detroit	
Ruprecht, Emil F.	M	
Ruskin, Samuel H.	Detroit	
Russell, John C.	Detroit	
Rydzewski, Jos. B.	Detroit	
Ryerson, Frank L.	Detroit	
Sachs, Herman K.	M	
Sack, A.	M	
Sadowski, Roman	Detroit	
Sage, Edward O.	Detroit	
Sage, Thomas	Detroit	
Sager, E. L.	Detroit	
St. Amour, Hector	Detroit	
St. Louis, R. J.	River Rouge	
Sakorraphos, Stelios	Detroit	
Salchow, Paul T.	Detroit	
Salowich, John	Detroit	
Saltzstein, Harry C.	Detroit	
Sander, I. W.	Detroit	
Sanders, Alex W.	Detroit	
Sanderson, A. R.	Grosse Pte. Park	
Sanderson, James H. (E)	Detroit	
Sanderson, Joseph L.	Detroit	
Sanderson, Suzanne	Detroit	
Sandler, Nathaniel	M	
Sands, G. E.	Detroit	
Sandweiss, D. J.	Detroit	
Sanford, Hawley S.	M	
Sargent, Wm. R.	Detroit	
Sauk, John J.	M	
Sauter, Simon H.	Detroit	
Savignac, Eugene M.	Detroit	
Sawyer, Harold F.	Detroit	
Scarney, Herman D.	M	
Schaefer, Robt. L.	M	
Schaefer, Martin	Detroit	
Schembeck, I. S.	Detroit	
Schenden, A. J.	Melvindale	
Schiller, A. E.	Detroit	
Schilling, Charles E.	Detroit	
Schinagel, Geza	Detroit	
Schirack, Ray	Detroit	
Schlacht, Geo. F.	Romulus	
Schlafer, Nathan H.	Detroit	
Schlemer, John H.	Detroit	
Schmidt, Harry E.	M	
Schmidt, J. Robt.	M	
Schmidt, Milton R.	M	
Schmitt, Norman L.	Detroit	
Schneek, R. J.	Detroit	
Schneider, Curt P.	M	
Schoenfeld, Gilbert D.	Detroit	
Schorr, Robt. L. (E)	Detroit	
Schooten, Sarah S.	Detroit	
Schreiber, W. F.	Detroit	
Schroeder, Carlisle F.	M	
Schulte, Carl H.	Detroit	
Schultz, Ernest C.	Detroit	
Schultz, Robt. F.	M	
Schwartz, Ben	Detroit	
Schwartz, H. Allen	Detroit	
Schwartz, Louis A.	M	
Schwartz, Marvin	Detroit	
Schwartz, Oscar D.	M	
Schwartzberg, Jos.	M	
Schweigert, C. F.	M	
Sciarrino, Stanley V.	Detroit	
Scott, J. W.	Detroit	
Scott, R. J.	M	
Scott, Wm. J.	Grosse Pte. Farms	
Seabury, Frank P.	Detroit	
Secord, Eugene W.	Detroit	
Seeley, James B.	Dearborn	
Seeley, Ward F.	Detroit	
Segar, Lawrence F.	Detroit	
Seibert, Alvin H.	Grosse Pte. Park	
Seiferlein, Archie L.	M	
Selby, C. D.	Detroit	
★Seljadi, Joseph Eugene		
Sellers, Graham	Detroit	
Selling, Lowell	Detroit	
Selman, J. H.	Detroit	
Sewell, George	Detroit	
Seymour, Wm. J.	Detroit	
Shafarman, Eugene	Detroit	
Shaffer, Jos. H.	M	
Shaffer, Loren W.	Detroit	
Shaffer, Royce R.	Detroit	
★Died in Military Service.		
Shapiro, Oscar U.	Detroit	
Shapiro, Reuben I.	M	
Sharp, Martin C.	Detroit	
Sharrer, Chas. H.	Detroit	
Shaw, Robert G.	Detroit	
Shawan, H. K.	Detroit	
Shebasta, Emll	M	
Sheldon, John A.	Detroit	
Shelton, C. F.	M	
Sheppard, Emma W.	Detroit	
Sheppard, Wm. B.	M	
Sheridan, Chas. R.	Detroit	
Sherman, B. B.	Detroit	
Sherman, Wm. L.	Detroit	
Sherrin, Edgar R.	M	
Sherwood, Dewitt L.	Detroit	
Shewchuk, Alexander P.	M	
Shields, Wm. L.	Detroit	
Shifrin, Peter G.	M	
Shipton, W. Harvey	Detroit	
Shlain, Benj.	Detroit	
Shore, O. J.	Detroit	
Shotwell, Carlos W.	Detroit	
Shulak, Irving B.	M	
Shurly, Burt R.	Detroit	
Siddall, Roger S.	Detroit	
Sieber, Edward H.	Dearborn	
Siefert, John L.	M	
Siefert, Wm. A.	Detroit	
Siegel, Henry	M	
Silver, Israel W.	Detroit	
Silberman, I. Z.	Detroit	
Silberman, M. M.	Detroit	
Simon, Emil R.	Detroit	
Simons, Edward J.	M	
Simpson, C. E.	Detroit	
Simpson, H. Lee.	Detroit	
Singer, Floyd W.	Detroit	
Sippola, Geo. W.	Detroit	
Sisson, John M.	Detroit	
Siwka, Isidore J.	Detroit	
Skinner, Edward F.	Detroit	
Skinner, W. Clare	Detroit	
Skolnick, Max H.	M	
Skrzycki, Stephen S.	Detroit	
Skully, E. J.	Detroit	
Skully, G. A.	M	
Sladen, Frank J.	Detroit	
Slate, Raymond N.	Detroit	
Slaughter, Fred M.	Detroit	
Slaugenhaupt, J. G.	Detroit	
Slatzinski, Leo W.	Detroit	
Slevin, John G.	M	
Sliwin, Edward P.	M	
Small, Henry	M	
Smeck, Arthur R.	Detroit	
Smeltzer, Merrill	M	
Smith, F. Janney	Detroit	
Smith, Fred R.	M	
Smith, C. Gerritt	Detroit	
Smith, Henry L.	Detroit	
Smith, J. Allen	Detroit	
Smith, James A.	Detroit	
Smith, Vine LaRue	Detroit	
Smyth, Charley J.	Eloise	
Snedeker, Bernard C.	M	
Snow, L. W.	Northville	
Snyder, Arthur M.	Detroit	
Sobin, D. J.	Detroit	
Socall, Charles J.	M	
Somers, Donald C.	M	
Sonde, Lewis P.	Detroit	
Sorock, Milton L.	M	
Spademan, Loren C.	Detroit	
Spalding, Edward D.	M	
Sparling, Harold I.	M	
Sparling, Irene L.	Northville	
Speck, Carlos C.	Allen Park	
Spector, Maurice J.	M	
Spencer, Frank	Detroit	
Spero, Gerald	Detroit	
Sperry, Frederick L.	Detroit	
Spiro, Adolph	M	
Springborn, B. R.	Detroit	
Sprunk, Carl	M	
Sprung, John P.	Detroit	
Spurrier, Ethelbert	M	
Squires, W. H.	Eloise	
Stafford, Claude M.	Detroit	
Stafford, Frank W. J.	Detroit	
Stageman, John C.	M	
Stahly, Edward	Northville	
Stalker, Hugh	Grosse Pointe	
Stamell, Meyer	M	
Stamos, Harry	Detroit	
Stanton, James M.	Detroit	
Stapleton, Wm. J., Jr.	Detroit	
Staars, Thomas C.	Detroit	
Stefani, E. L.	Detroit	
Stefani, Raymond T.	M	
Steffes, Everette M.	M	
Stein, Albert H.	M	
Stein, Emory	Detroit	
Stein, Saul C.	M	
Steinbach, Henry B.	Detroit	
Steinberger, Eugene	Detroit	
Steiner, Gabriel	Detroit	
Steiner, Louis J.	Detroit	
Steiner, Max	M	
Steinhardt, Milton J.	M	
Stellhorn, Chester E.	Detroit	
Stellhorn, M. C.	Detroit	
Sterling, Lawrence	Detroit	
Sterling, Robt. R.	Detroit	
Stern, Harry L.	Detroit	
Stern, Leonard H.	Detroit	
Stern, Louis D.	Detroit	
Stevens, Rollin H. (E)	Detroit	
Stewart, Thomas O.	Detroit	
Stiebel, Daniel M.	Detroit	
Stirling, Alex M.	Detroit	
Stith, Dwight E.	Detroit	
Stobbe, Godfrey D.	M	
Stocker, Harry	Detroit	
Stockwell, B. W.	M	
Stofer, Bert E.	Detroit	
Stokfisz, T.	M	
Stoltz, Harold F.	Detroit	
Stout, Lindley H.	Detroit	
Straith, Claire L.	Detroit	
Stricker, Henry D.	Detroit	
Strickroot, Fred L.	M	
Strohschein, Don F.	Detroit	
Stubbs, C. T.	Detroit	
Stubbs, Harold W.	Detroit	
Stuecheli, Milton B.	Detroit	
Sugar, David I.	Detroit	
Sugarman, Marcus H.	M	
Sullivan, Hugh A.	Detroit	
Summers, Wm. S.	Detroit	
Surbis, John P.	Detroit	
Sutherland, J. M.	Detroit	
Swaney, Colletta M.	Detroit	
Swanson, C. N.	Detroit	
Swanson, Robt. G.	M	
Swartz, J. N.	Detroit	
Swift, Karl L.	Detroit	
Switzer, Bertrand C.	Detroit	
Szappanyos, Bela T.	Detroit	
Szedja, J. C.	M	
Szilagyi, Emerick D.	M	
Szilachetka, V. E.	M	
Szimigiel, A. J.	Detroit	
Tamblyn, E. J.	Detroit	
Tann, H. E.	Detroit	
Tapert, Julius C.	Detroit	
Tasker, Helen	Detroit	
Tassie, Ralph N.	Detroit	
Tatelis, Gabriel	Detroit	
Taylor, Aaron	M	
Taylor, Ivan B.	M	
Taylor, Nelson M.	M	
Tear, Malcolm L.	M	
Teitelbaum, Myer	M	
Tenaglia, Thomas A.	M	
Tenerowicz, Rudolph G.	Washington, D. C.	
Test, Frederick C. II.	Detroit	
Texter, Elmer C.	Detroit	
Thompson, Alderman	Detroit	
Thompson, David L.	Detroit	
Thompson, H. E.	M	
Thompson, H. O.	M	
Thompson, James B.	M	
Thompson, W. A.	Detroit	
Thomson, Alexander	Detroit	
Thosteson, Geo. C.	Detroit	
Thurstion, Roger G.	M	
Tichenor, E. D.	Detroit	
Toepel, Otto T. (E)	Detroit	
Tomsu, Charles L.	Detroit	
Top, F. H.	Detroit	
Torrey, H. N.	Detroit	
Townsend, Frank M.	Detroit	
Townsend, Kyle E.	Detroit	
Trask, Harry D.	Detroit	
Tragenza, W. Kenneth	Detroit	
Troester, Geo. A.	M	
Trombley, Bryan	Detroit	
Trombley, Joseph J., Jr.	M	
Troxell, Emmett C.	Detroit	
Truog, Clarence P.	Battle Creek	
Truszkowski, E. G.	M	
Trythall, S. W.	Detroit	
Tufford, Norman G.	Detroit	
Tulloch, John	M	
Tupper, Roy D.	Detroit	
Turbett, Claude W.	Detroit	
Turcotte, Vincent J.	Detroit	
Turkel, Henry	Detroit	
Tuttle, Wm.	M	
Tyson, Wm. E. E.	Detroit	

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	Ujda, Chester J.	Wyandotte
Detroit	Ulbrich, Henry L.	Detroit
M	Ulch, Harold W.	Detroit
M	Ulrich, Willis H.	M
Detroit	Umphrey, Clarence E.	Detroit
Detroit	Usher, Wm. Kay.	Detroit
Detroit	Vale, C. Fremont	Detroit
Detroit	Van Auken, Edw. A.	M
M	Van Baalen, M. R.	Detroit
M	VandeVelde, Honore	Detroit
Detroit	Van Gundy, Clyde R.	Detroit
Detroit	Van Heldorf, Harry	Detroit
Detroit	Van Nest, A. E.	Detroit
Detroit	Van Rhee, George.	Detroit
Detroit	Van Riper, Steven L.	Detroit
Detroit	Vardon, Colin C.	Detroit
Detroit	Vardon, Edward M.	Detroit
Detroit	Vasu, V. O.	Detroit
Detroit	Vergosen, Harry E.	M
Detroit	Vincent, J. LeRoi	M
Detroit	Voegelin, Adolph E.	Detroit
Detroit	Voelkner, Geo. H.	Detroit
M	Vogel, Hymen A.	Detroit
Detroit	Vokes, Milton D.	Detroit
M	Von Der Heide, E. C.	Detroit
M	Vossler, A. E.	Detroit
M	Vreeland, C. Emerson	Detroit
Detroit	Waddington, Jos. E. G. (E.)	Detroit
Detroit	Wadsworth, Geo. H.	M
Detroit	Waggoner, C. Stanley	Detroit
M	Waggoner, Lyle G.	Detroit
Detroit	Wainger, M. J.	Detroit
Detroit	Wainstock, Michael	Detroit
Detroit	Waldott, Geo. L.	Detroit
Detroit	Walker, Enos G.	M
M	Walker, J. Paul.	Detroit
M	Walker, Leo Whitney	Detroit
Detroit	Walker, Roger V.	Detroit
Detroit	Walker, Sheldon A.	Detroit
Detroit	Wallace, S. Willard.	Detroit
Detroit	Walls, Arch	Detroit
Detroit	Walser, Howard C.	Detroit
Detroit	Walsh, Chas. R.	Detroit
M	Walsh, Francis P.	Detroit
Detroit	Walters, Albert G.	Detroit
Detroit	Waltz, Frank D. B.	Detroit
Detroit	Waltz, Paul J.	Detroit
M	Wander, Wm. G.	Detroit
M	Ward, W. K.	Detroit
M	Warden, Horace F.	Detroit
M	Warner, H. W.	M
Detroit	Warner, P. L.	Detroit
Detroit	Warren, L. P.	M
Detroit	Warren, Wadsworth	M
Detroit	Wasserman, Lewis C.	Detroit
Detroit	Waszak, Chas. J.	Detroit
Detroit	Watkins, John P.	Detroit

Watson, Douglas J.	M.
Watson, Harwood G.	Dearborn
Watson, J. Edwin	Detroit
Watson, Robt. W.	Highland Park
Watters, F. L.	M.
Watts, Frederick B.	M.
Watts, John J.	Detroit
Wax, John H.	M.
Wayne, M. A.	Detroit
Weaver, Clarence E.	Detroit
Weaver, Delmar F.	Detroit
Webster, John E.	M.
Weed, Milton R.	M.
Wehenkel, Albert M.	Detroit
Weiner, M. B.	Detroit
Weingarten, David H.	Detroit
Weinstein, Jacob	Detroit
Weisberg, A. Allen	M.
Weisberg, Harry	Detroit
Weisberg, Jacob	M.
Weisenthal, Irvin	Detroit
Weiser, Frank A.	Detroit
Weiss, J. G.	M.
Welch, John H.	Detroit
Weller, Charles N.	Detroit
Wellman, W. W.	Ypsilanti
Wells, Martha	Detroit
Weltman, Carl	Detroit
Wendel, Jacob S.	Detroit
Wenzel, Jacob F.	Detroit
Wershaw, Max	Detroit
West, Howard G.	Detroit
Weston, Earl E.	Detroit
Weston, Horace L.	M.
Westover, Charles	Plymouth
Weyher, Russell F.	Detroit
Whalen, Neil J.	Detroit
Wharton, Thomas V.	Wyandotte
Whinnery, R. A.	Detroit
White, Milo R.	Detroit
White, Milton W.	Detroit
White, Prosper D., Jr.	M.
White, Theodore M.	Detroit
Whitehead, L. S.	M.
Whitehead, Walter K.	Detroit
Whiteley, Robt. K.	M.
Whitney, Elmer L.	Detroit
Whitney, Rex E.	M.
Whittaker, Alfred H.	Detroit
Wiant, R. E.	Detroit
Wickham, A. B.	Detroit
Wiechowski, Henry E.	M.
Wiener, I.	M.
Wight, Fred B.	Detroit
Wilcox, L. F.	M.
Wilkinson, A. P.	Detroit
Williams, C. J.	Detroit
Williamson, Edwin M.	M.

Williamson, John C.	Dearborn
Wills, J. N.	Detroit
Wilson, W. N.	M
Wilson, Stuart	M
Wilson, Gerald A.	Detroit
Wilson, John D.	Detroit
Wilson, M. C.	M
Wilson, Walter J.	Detroit
Wilson, Walter J., Jr.	M
Winfield, James M.	M
Winsor, Carleton	M
Wiren, Lennart W.	Detroit
Wishropp, E. A.	M
Wisner, Harold E.	Detroit
Wissman, H. C.	Detroit
Wittenberg, Arthur A.	Detroit
Wittenberg, Samson S.	Detroit
Wittenberg, Sydney S.	Detroit
Witter, Frank	Detroit
Witter, Joseph A.	M
Witwer, Eldwin R.	Grosse Pte. Park
Wolfe, Max O.	Detroit
Wollenberg, R. A. C.	Detroit
Wood, W. C.	Detroit
Woodry, Norman L.	Detroit
Woods, H. B.	Detroit
Woods, W. Edward.	Detroit
Woodworth, Wm. P.	Detroit
Worznaik, Joseph J.	Detroit
Wreggit, W. R.	M
Wruble, Joseph	Detroit
Wunsch, Richard E.	M
Wygant, Thelma	Detroit
★ Wytowich, Walter	Detroit
Yesayan, H. C.	Detroit
Yonkman, Frederick F.	Detroit
York, Frederick P.	M
Yott, Wm. J.	M
Young, Donald A.	M
Young, Donald C.	M
Young, James P.	Detroit
Young, Lloyd B.	M
Young, Viola M.	Detroit
Zaik, Edward J.	Detroit
Zbudowski, A. S.	M
Zbudowski, Myron R.	M
Zemens, Joseph L.	Detroit
Zielinski, Chas. J.	Detroit
Zimmerman, I. J.	M
Zimmerman, R. L.	Detroit
Zinn, Geo. H.	Detroit
Zinterhofer, John	Detroit
Zinterhofer, Louis	Detroit
Zlatkin, Louis	Detroit
Zolliker, Carl R.	Detroit
Zuelzer, Wolfgang	Detroit
Zukowski, Sigmund A.	M

## **Wexford-Kalkaska-Missaukee Counties**

Hoover, J. W.	Evarts
Inman, J. C.	M.
Lommen, Ralph	Manton
McCall, James H.	Lake City
McManus, Edwin	Mesick
Merritt, C. E.	Manton
Mills, Robt. E.	Boon
Moore, G. P.	M.

Moore, Sair C.	Cadillac
Murphy, Michael R.	Cadillac
Purdy, Calvin S.	Buckley
Seltzer, S. N.	Marion
Showalter, L. E.	M.
Smith, Wallace J.	Cadillac
Tornberg, Gordon C.	Cadillac

## \* YOU AND YOUR BUSINESS \*

### AMA OPENS WASHINGTON, D. C., OFFICE

The Washington, D. C. office of the American Medical Association was opened on April 3 at 1835 I. Street, N. W. Room 900 in Columbia Medical Building has been leased as Washington headquarters. The telephone number is EXecutive 3257.

The establishment of the Washington information office will receive the approbation of every Doctor of Medicine who has appreciated the need of this action for some time. The office will be under the direction of the Council on Medical Service and Public Relations and its Secretary, and in direct charge, for the time being, of Joseph S. Lawrence, M.D., of Albany, New York who has represented the New York State Medical Society in Albany for over twenty years.

\* \* \*

### EMIC PROGRAM

A subcommittee of the Committee on Appropriations, U. S. House of Representatives, conducted a hearing in April to consider the request of the U. S. Children's Bureau for an additional appropriation of \$42,800,000 to carry on the Emergency Maternal and Infant Care Program (which to date has cost over \$24,000,000). The American Medical Association was represented at the hearing in Washington and presented the views of the AMA House of Delegates with respect to this program of governmental medicine.

\* \* \*

### DUES AND ASSESSMENTS, 1944

The Michigan State Medical Society annual dues are \$12. A special assessment for 1944, for public educational purposes, was levied by the MSMS House of Delegates last September. Membership cards are issued only upon payment of \$22 to the State Society, representing the regular dues and the special assessment of 1944.

The assessment is prorated for NEW MEMBERS only, according to the quarter of the year in which the new members are certified to the State Society, similar to the arrangement provided for dues in Chapter 1, Section 3 of the MSMS By-Laws.

\* \* \*

### DISPENSING OF VITAMINS, CAMPHORATED OIL AND BORIC ACID

The dispensing by a factory or store of individual vitamin pills is prevented by the Michigan Pharmacy Law, but there is nothing in the law to prevent the plant or shop from distributing them in original unbroken packages, provided they are distributed as a food supplement.

The 1941 Michigan Legislature passed the Trade Diversion Act which prevents manufacturers from selling to their employes any item manufactured by another manufacturer.

A Doctor of Medicine in the plant, shop, or store,

has the legal right to dispense whatever vitamins or any other medicines he may desire to dispense.

Camphorated oil and boric acid are household remedies and therefore exempt from the provisions of the Pharmacy Act restricting the sale of drugs, official in the U. S. Pharmacopoeia, to license drug stores, according to a recent Circuit Court decision in Muskegon (State of Michigan vs. Anderson). This is the first court test in Michigan to consider that particular phase of exemption set forth in the Michigan Pharmacy Law.

\* \* \*

### "HEALTH INSURANCE FOR CANADA"

An excellently prepared brochure on "Health Insurance for Canada" has been published by the Research Bureau of the Canadian Pharmaceutical Manufacturers Association, P. O. Box 22, Terminal "A", Toronto, Canada. Complimentary copies are available upon request.

The following paragraph, titled "Too Much Sickness Insurance, Not Enough Health Insurance" is typical of the thought given to this brochure.

"The terms 'sickness insurance' and 'health insurance' connote two quite different things. Sickness insurance concerns itself with facilitating the recovery of people from sickness, once it has overtaken them. Health Insurance concerns itself with minimizing the hazards that are likely to make them sick. On the theory that the more effective health insurance is made, the less will be the costs for sickness insurance, it would seem only logical that Canada should be planning to spend more and more on preventive measures that will be permanent in their beneficial effect, so that she may look forward to having to spend less and less on medical services that merely put a temporary stop to troubles that need not have happened."

\* \* \*

### FEES AND BILLING UNDER AFFLICTED CHILD ACT

Under the provisions of the Crippled and Afflicted Children's Acts, physicians are entitled to a fee for the examination of a crippled or afflicted child to determine the medical need for hospital care. The fee for this examination is \$1.50.

The physician is urged to furnish complete information on the physician-surgeon certificate (Form MCC 121) as to the nature of the illness and the treatment recommended so that the Commission may have sufficient information available to determine the classification of the child under the State Acts, the extent of services required, and for proper completion of Commission records.

Billing forms for this purpose (Voucher A-75-R) may be obtained from the hospital or the Judge of Probate and should be requested at the same time as

## YOU AND YOUR BUSINESS

the physician-surgeon certificate is obtained. Physicians should bill on the prescribed form within 60 days following the examination and should obtain the signature of the Judge of Probate indicating his approval of the service rendered. This billing should be forwarded to the Michigan Crippled Children's Commission, 458 Hollister Building, Lansing, Michigan, by the Judge of Probate or by the physician himself.

The examination fee will not be allowed when the physician who makes the examination determining the medical need is the physician who attends the child in the hospital.

### MSMS RADIO HOUR OVER WJR

Beginning April 27, the MSMS Radio Committee began a weekly radio period over Station WJR, Detroit. Arrangements were completed through the co-operation of the officials of WJR and the Extension Division of the University of Michigan. Talks will be given every Thursday evening, 11:15 p.m.

The program through May includes "Modern Treatment of Arthritis" by Richard H. Freyberg, M.D., Ann Arbor; "Accidents in Childhood" by Ernest H. Watson, M.D., Ann Arbor; "Postwar Problems Relative to Tropical Diseases," Robert A. Hettig, M.D., Ann Arbor; "Sick Headaches: Their Significance and Treatment," Russell N. DeJong, M.D., Chairman MSMS Radio Committee; "Swelling of the Ankles," Richard H. Lyons, M.D., Ann Arbor.

\* \* \*

### CLINIC DAY, FORT CUSTER, JUNE 21

The War-Time Graduate Medical Meetings Committee announces the second Clinic Day in its Michigan program to be held at the Station Hospital, Fort Custer, on Wednesday, June 21.

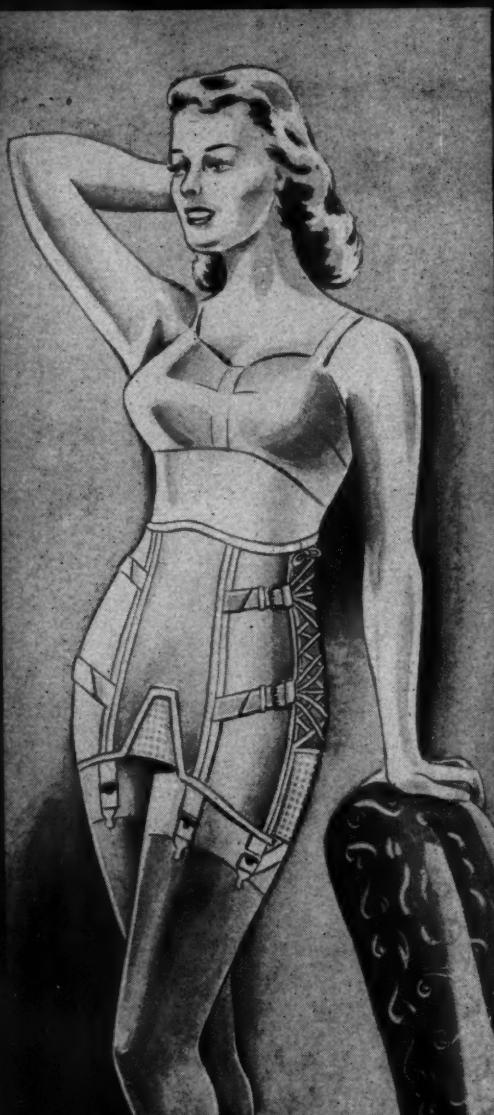
The tentative program is as follows:

1. Convalescent Reconditioning Program at the Station Hospital—Orientation and demonstration of the class in progress. 1:00 to 1:50 p.m.
2. Malaria Control — Environmental and Individual Demonstration by "County Fair" Method. Put on by line officers and troops of the Military Police Replacement Training Center, followed by an inspection of the Field Sanitation Device Area. 2:00 to 2:55 p.m.
3. Foot and Back Clinic. 3:05 to 3:55 p.m.
4. Demonstration of Military Medical Boards in session:—(a) Disposition Board; (b) CDD Board (Certificate of Disability for Discharge—medical discharge). 4:00 to 5:00 p.m.
5. Picnic! Nurses and Officers Mess.

J. M. ROBB, M.D., Detroit  
Michigan Chairman

MAY, 1944

## ORTHOPEDIC & SURGICAL APPLIANCES



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## MICHIGAN'S DEPARTMENT OF HEALTH

H. ALLEN MOYER, M.D., Commissioner, Lansing, Michigan

### MENINGITIS AMONG NEWBORN TRACED TO SALMONELLA PANAMA

The recent high incidence of meningitis of the newborn in Battle Creek and vicinity has been found to be due to *Salmonella panama*, a bacillus belonging to the enteric group and closely related to the typhoid bacillus.

*Salmonella panama* which, in older children and adults, generally causes a moderate gastroenteritis, may invade the blood stream in the very young and result in a meningitis with a high fatality rate.

An outbreak of this infection in hospital nurseries can be brought under control by the adoption of a technique similar to that used for the control of typhoid and other intestinal infections.

A number of carriers of the *Salmonella panama* have been discovered among adults which is very significant. At present all known carriers are being given the same supervision by local full-time health departments as are typhoid carriers.

More positive cases are now (May 2, 1944) on record in the Battle Creek area than are listed in previous history.

### SEVEN DISEASES ABOVE SEVEN YEAR MEDIAN

During March the incidence of the following communicable diseases in Michigan was above the seven year median according to the Bureau of Epidemiology of the Michigan Department of Health:

	March 1944	Median 7 years
Meningococcic meningitis	138	6
Measles	6526	1490
Tuberculosis	607	498
Diphtheria	27	25
Undulant Fever	9	8
Syphilis	1488	936
Gonorrhea	1078	576

### NEW DIARRHEA AND ENTERITIS CONTROL SERVICE OFFERED

Announcement is made by the Michigan Department of Health and the W. K. Kellogg Foundation that a diarrhea and enteritis study group which has been in training for a year is now ready to give assistance to hospitals experiencing active outbreaks of nursery diarrhea.

The study group is in charge of a licensed physician and is made up of two sections, one working in the field and the other in the laboratory.

The field section consists of a physician, two graduate nurses and a medical secretary. This staff will collect clinical, epidemiologic, sanitary and laboratory data and give clinical and control assistance. Additional medical, nursing and engineering specialists will be recruited locally when needed and paid from study funds.

The laboratory section is composed of two bacteriologists, one virologist, five laboratory assistants and one secretary. This group has been especially trained and equipped to analyze all types of laboratory specimens sent in from the hospitals.

Field operations will be limited to Michigan, northern Ohio and northern Indiana. Notification that the diarrhea and enteritis study group is now ready for duty has been sent to state and local medical societies in this area and to hospital administrators, secretaries of hospital associations and state and local health officers. Any hospital experiencing an active outbreak of nursery diarrhea may request the services of the study group. The cost of field operations will be borne by the W. K. Kellogg Foundation and the Department. Requests should be made by telephone to Dr. C. C. Young, Director of Laboratories, Michigan Department of Health.

### STATEWIDE PLASMA PROGRAM IN OPERATION

Enlarging of facilities will be undertaken at once for the processing of blood plasma in the state health department's Lansing laboratories. Planned construction will provide an additional 3,900 square feet of floor space, permitting the quadrupling of present production and the supplying of plasma to all Michigan communities.

A \$250,000 appropriation was voted for the enlarging of the state's plasma program during the recent special session of the legislature.

Physicians are supplied with the plasma, free of charge, for the treatment of civilian patients. Its use is urged in the treatment of shock resulting from accident, surgical operations or burns, and from hemorrhages complicating such diseases as typhoid, dysentery and diarrhea of the newborn.

### MICHIGAN DEATHS DUE TO CANCER

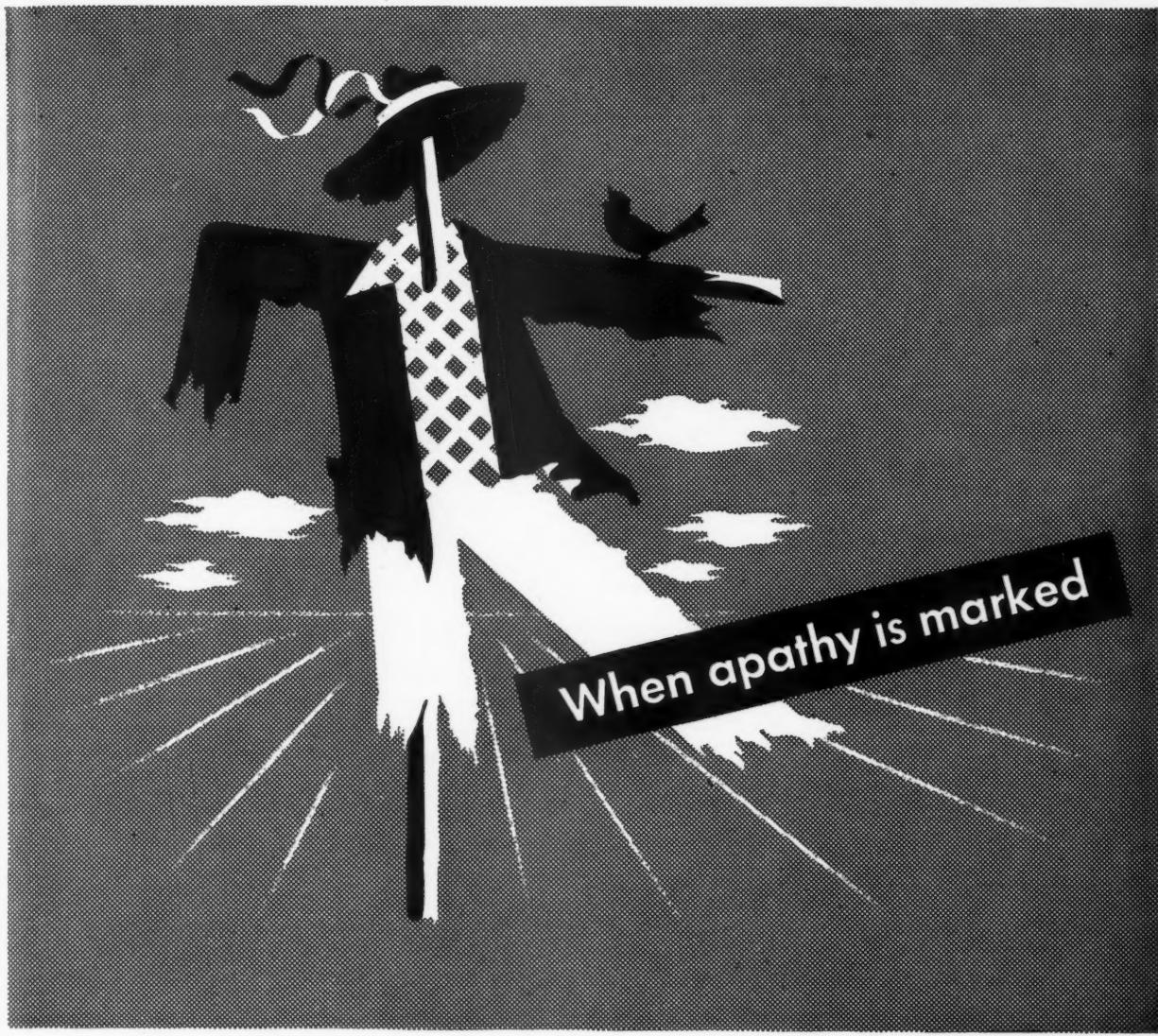
Bringing Michigan's cancer death rate to an all-time high, 6,807 deaths from cancer were reported in 1943. Cancer accounted for twelve of each 100 deaths, ranking second only to heart disease as a cause of death.

The steady rise of the cancer death rate may be explained in part by the improvement in diagnostic methods which, each year, places increasing numbers of deaths in the cancer column. Some authorities, however, believe there is an actual increase each year in the number of persons in whom cancer develops. Also, cancer claims more victims in the higher age brackets and the average life span has been steadily lengthened.

### FARM WORKERS NEED TETANUS TOXOID

Immunizing of farm workers against lockjaw is advised by the state health department, whose records show that in Michigan seven out of every ten deaths from lockjaw occur in farm families.

Production of the tetanus toxoid was started in health department laboratories when Pearl Harbor cast the shadow of bombing threats over the nation's industrial centers. Distribution of the tetanus toxoid was started a year ago this month. So far the largest quantities of the toxoid have gone to the Detroit area.



When apathy is marked

In patients with marked apathy and associated low muscle tone and low resistance, dramatic response may often be effected by adrenal cortex therapy when these symptoms are due to adrenal cortical insufficiency.

Adrenal Cortex Extract (Upjohn) used as replacement therapy in these cases often restores alertness and a healthy outlook. It relieves asthenia, strikingly increases resistance to infection, improves capacity for work, and strengthens muscle tone. Available for subcutaneous, intramuscular, and intravenous therapy.

## Adrenal Cortex Extract (Upjohn)

Sterile solution in 10 cc. rubber-capped vials for subcutaneous, intramuscular and intravenous therapy

**Upjohn**  
Kalamazoo Michigan

ANOTHER WAY TO SAVE LIVES . . . BUY WAR BONDS FOR VICTORY

MAY, 1944

Say you saw it in the Journal of the Michigan State Medical Society



## Woman's Auxiliary



### COUNTY PRESIDENTS

County presidents are requested to send Mrs. Wm. Hubbard, 1205 Marine Street, Flint, the names and present address of your members who are with their husbands in service or at any address other than their regular one.

The Woman's Auxiliary to the AMA will convene for their national convention June 12-15 at the Knickerbocker Hotel, Chicago. County presidents are invited to notify Mrs. Otto Hult, 1204 Lake Shore Drive, Gladstone, concerning members who hope to attend.

### INGHAM COUNTY

The auxiliary to the Ingham County Medical Society had a Bohemian dinner in February at the home of Mrs. O. M. Randall. Dr. Clara Shepherd spoke on "China."

Mrs. L. M. Snyder opened her home on March 20th for a guest day of the Auxiliary. The sum of one hundred dollars was voted for the Red Cross. Dr. H. C. Batson, director of the biological division of the State Department of Health Laboratories, spoke on "Trends in Modern Therapy."

### ST. CLAIR COUNTY

The March meeting of the Auxiliary was held at The Chateau in Port Huron. Dr. J. A. Dunn, technical director of the Diamond Crystal Salt Company in St. Clair, spoke on "The Latest Developments in Food."

### THE FUNCTION OF THE WOMAN'S AUXILIARY

At the annual session of the State Auxiliary in Detroit, 1943, President H. H. Cummings M.D., paid generous tribute to the wives of the doctors and made most of us feel that we have an important job to do and one that apparently we are doing fairly well. He said, "Woman is the generator—the dynamo—that makes a successful physician. Women create in the home a quiet place where the doctor can come for peace. He goes out with new vigor to meet the cares and problems of the present day."

F. E. Reeder, M.D., Chairman of the Advisory Council, also spoke with sincerity and feeling:



"Physicians today have a double duty—they have not only to keep up the traditions of the practice of medicine, but are now on the defensive attempting to prevent the destruction of the practice of medicine. There has never been a crisis in which the medical profession has not functioned in the defense and relief of our country, but it is now on the verge of persecution. The strength of any nation is the health of its people and regimentation will not furnish the safeguard to health that the present system furnishes."

Mrs. Eben Carey, President of the National Auxiliary, brought home a point that perhaps has been taken more or less for granted: "It is only because our husbands are physicians that we have the privilege of membership in the Auxiliary." Apparently we do not value this membership sufficiently or we would safeguard it by being more interested in the future of the medical profession. We have become interested in many activities because of the present grave situation of the world and the need for volunteer workers in every field. But our husbands should be our chief concern and duty. We must not lose ourselves so completely in other interests that when this war is over our husbands will find themselves without a profession.

*Golf Tournament at A.M.A.* Monday, June 12, The American Medical Golfing Association will hold its 29th Annual Tournament at Flossmoor Country Club, Chicago. All AMA Fellows are invited to attend. Applications for Fellowship may be obtained by writing Bill Burns, 916 N. Capitol, Lansing 6, Michigan.

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# OBJECTIVE

## REDUCTION OF FEMALE ABSENTEEISM

Statistics show that women absent themselves from work much more often than men; indeed, such absenteeism is said to be 50 per cent<sup>1</sup> higher among women.

Though available data do not clearly assign the responsibility for this marked differential, obviously menstrual inconveniences account for a considerable proportion of the days lost.

On this point Pommerenke<sup>2</sup> recently made the following observation before the American Association of Industrial Physicians and Surgeons: "With a better understanding of the purpose and nature of menstruation, and its recognition as physiological rather than as a pathological process, many a woman may be re-educated and come to regard the so-called difficult days as days in which she need not seriously curtail her usual activities."

Many physicians have discovered the contribution which *improved menstrual hygiene* (as with the intravaginal tampon Tampax) affords this reeducation process—since it provides such a welcome sense of security, freedom and poise by relieving the physical distress and emotional uncertainty caused by vulval irritation from perineal pads, or from olfactory offense, or conspicuous bulging under slacks or coveralls.

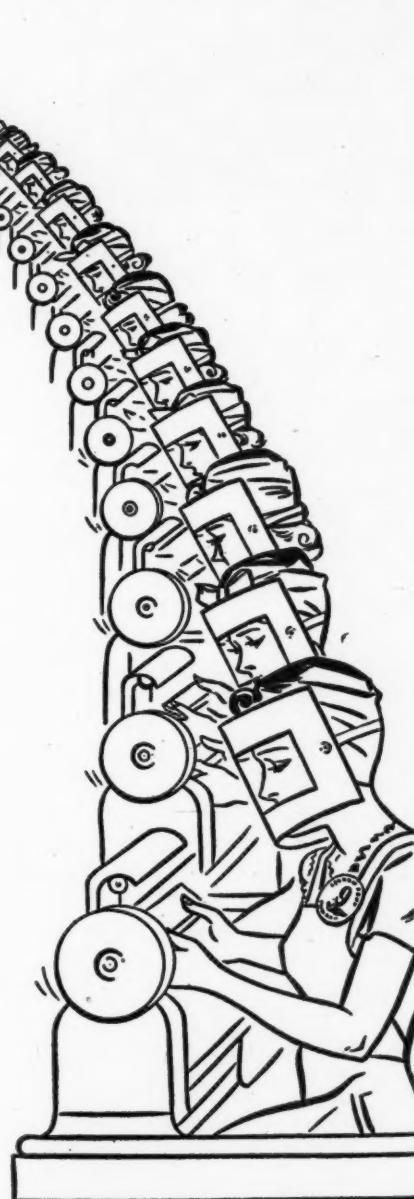
Tampax can be used easily and safely—it will not irritate delicate tissues nor block the flow. And its three different absorbencies permit individual regulation depending upon daily needs. Compressed into a one-time-use applicator, it may be inserted and removed simply and daintily.

Your patients should be grateful to you for recommending Tampax—and (in many cases) it may enable them to stay "on the job" where they are so vitally needed.

(1) Mod. Med., 11:130, 1943; (2) Ind. Med., 12:512, 1943

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## IN MEMORIAM

### DIED IN MILITARY SERVICE

**Joseph Eugene Seliady** of Detroit was born March 18, 1902 in Hungary, and was graduated from the Detroit College of Medicine and Surgery in 1932. He interned at Eloise Hospital and then became associated with the Eastlawn Sanitarium in Northville, in which community he also engaged in the private practice of medicine. He entered military service in the Army of the United States in May 1942 and was stationed at Camp Hulen, Palacios, Texas. His death occurred at Fort Sam Houston, Texas, on November 20, 1943, as a result of complications following a gall-bladder surgery.

**Charles W. Ash** of Bay City was born in the year 1877 and was graduated from the Detroit College of Medicine in 1903. Doctor Ash practiced medicine and surgery in Bay City for many years. He was president of Bay County Medical Society in 1930 and in 1941 was elected to Retired Membership in the Michigan State Medical Society. Doctor Ash died March 5, 1944.

**Gordon H. Bahman** of Flint was born March 3, 1887 in Marietta, Ohio and was graduated from the University of Michigan Medical School in 1913. After graduation, he opened his practice of medicine in Flint. Doctor Bahman was active in civilian defense, having been director of emergency medical services for the Flint Council of Defense. He organized special emergency defense staffs for Hurley, St. Joseph and Women's Hospitals. Commissioned a first lieutenant in World War I, Doctor Bahman went overseas working in eye-ear-nose-throat. When stationed at a hospital center at Gievers near the City of Tours, France, he was promoted to captain. He was honorably discharged in 1919. He died on December 23, 1943.

**Harry S. Berman** of Detroit was born in the year 1890 and was graduated from the College of Physicians and Surgeons of Baltimore. Doctor Berman practiced in Detroit for many years, limiting his work to pediatrics. He served in World War I, as a captain and worked on the Hoover Relief Commission in Czechoslovakia. Failing in efforts to re-enlist in World War II, he accepted the Medical Chairmanship of the Selective Service Board at Harper Hospital. Dr. Berman had many veteran affiliations. His large practice did not prevent him from participating in the various national and local medical meetings, conferences and postgraduate studies all of which was reflected in his mastery of diagnosis and treatment of pediatric problems. He died February 16, 1944.

**Constance M. Colignon** of Muskegon was born in the year 1890 and was graduated from the University of Illinois in 1914. Two years later he began his practice of medicine in Muskegon. He organized and directed the medical service of Campbell, Wyant and Cannon Foundry Company, the largest

## IN MEMORIAM

grey iron foundry in the world, making it one of the outstanding industrial medical departments in the country. Entering the medical corps of the army immediately after the declaration of war in 1917, Captain Colignon served overseas as surgeon with the 120th machine gun battalion of the 32nd division. In 1936 Doctor Colignon served the Muskegon County Medical Society as president. He died January 21, 1944.

Elmer A. Drolshagen of Detroit was born in 1894 and was graduated from Wayne University College of Medicine in 1917. He was a former Wayne County Medical Examiner. A native Detroiter, he served as a lieutenant in the Army Medical Corps in World War I. Doctor Drolshagen was active in many civic organizations. He died January 14, 1944.

Charles C. Landon of Battle Creek was born in 1859 and was graduated from the Hahnemann Medical College of Chicago in 1885. He practiced in Augusta for four years and then moved to Battle Creek where he was active in his profession until a year ago. Doctor Landon was elected to Emeritus Membership of the Michigan State Medical Society in 1939. In addition to his medical practice and the various medical societies of which he was a member, Doctor Landon found time to devote to many community activities. He had served as a member of the Battle Creek board of education for many years. Doctor Landon died February 7, 1944, after having been confined to his bed since 1942.

George Louis LeFevre of Muskegon was born October 22, 1865 on Grand Isle in Lake Champlain and was graduated from the Hahnemann Medical College of Chicago in 1891. He passed the State Board of Pharmacy in 1883, and at his death was Michigan's oldest registered pharmacist. For sixteen years, Doctor LeFevre served on the Michigan State Board of Registration in Medicine. Twice president, he was for years medico-legal advisor of the Muskegon County Medical Society. In 1933 he served as President of the Michigan State Medical Society. He also was a fellow of the American Medical Association and of the Surgeons' Club of Mayo Clinic. He was admitted to fellowship in the American College of Surgeons in 1915. The year after its founding. He aided in obtaining Mercy Hospital for Muskegon and served as its chief of staff from the time of its inception until 1942, when he became chief emeritus. He also served on the staff at Hackley hospital. Doctor LeFevre aided in obtaining the Muskegon County Tuberculosis Sanatorium and following its opening in 1924 he served as president of its board of trustees until his death. Besides being a leader in his profession, he was always interested in many civic affairs. In 1941 he was honored by the community and physicians of Michigan and the nation when he observed his golden anniversary as a physician. Doctor LeFevre died March 10, 1944.

James C. MacGregor of Flint was born January 19, 1872 at Taymouth, Saginaw County and was graduated from the Detroit College of Medicine in 1898. After graduation, he opened his practice of medicine in Flint. For many years he was a member of the Board of Hospital Managers of Hurley Hospital and served during the construction of the present building. Doctor MacGregor was president of the Genesee County Medical Society in 1933. He

MAY, 1944

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served on the Board of Directors of the Industrial Savings Bank and the Union Industrial Trust and Savings Bank and the National Bank of Flint. He was active in many fraternal and civic organizations. Dr. MacGregor died on February 29, 1944.

**Jacob Earl Meengs** of Grand Rapids was born in 1881 at Holland, and was graduated from Rush Medical School in 1904. Postgraduate work was taken by Doctor Meengs at Berlin, Munich and Vienna. From 1911 to 1913 he was resident physician at Lennox Hill Hospital in New York. For the next two years he was assistant to Doctor Max Einhorn, noted gastroenterologist of New York City, then he returned to Grand Rapids to continue his practice. Doctor Meengs specialized in gastroenterology and pathology until he was taken ill two months ago. He died February 3, 1944.

**George H. Palmerlee** of Detroit was born in 1872 at Romeo and was graduated from the Detroit College of Medicine in 1903. Dr. Palmerlee practiced and specialized in surgery for more than forty years in Detroit. He was a veteran of the Spanish-American War and held the rank of major in the National Guard until his retirement. Doctor Palmerlee died January 24, 1944.

**Harley A. Sears** of Coldwater was born in 1897 in Canada and was graduated from Queens University, Faculty of Medicine, Kingston. For many years he was assistant medical superintendent of the Kalamazoo State Hospital and a member of the staff for 21 years. Since February 1943, he had been

superintendent of the Coldwater State Home and Training School. Doctor Sears died on March 9, 1944.

**Clayton Myron Spencer** of Scottsville was born in 1884 near Kalamazoo and was graduated from the University of Michigan Medical School in 1906. He practiced in Freesoil and after World War I, located in Scottsville. In community life he was active, serving as mayor and also as director of the Scottsville State Savings bank. Doctor Spencer died January 31, 1944.

**Robert J. Walker** of Saugatuck was born July 11, 1869 in Strathroy, Ontario and was graduated from the Medical Faculty of Trinity University of Toronto in 1895. Doctor Walker opened his practice in Saugatuck in 1895 where he gave 48 years of service to the community. Active in civic affairs, Doctor Walker served several years on the school board, was director of the Fruitgrowers State Bank for 35 years, 12 of which he was chairman of the board. In World War I, Doctor Walker served as a lieutenant. He died on December 11, 1943, following an automobile accident.

Is it fair always to take and never give? Is it not logical to assume that many members of organized medicine are receiving its benefit but contributing nothing in return? In the main it may be stated that those physicians who complain most of getting so little benefit from organized medicine are, after all, putting in little. Can one accept the right to criticize if he has nothing constructive to offer as a substitute?—*Jour. Missouri M.A.*

## \* COUNTY AND PERSONAL ACTIVITIES \*

### 100 PER CENT CLUB FOR 1944

Allegan—J. E. Mahan, Secretary  
 Alpena-Alcona-Presque Isle—E. S. Parmenter, Secretary  
 Barry—H. S. Wedel, Secretary  
 Branch—James Bailey, Secretary  
 Clinton—T. Y. Ho, Secretary  
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 Grand Traverse-Leelanau-Benzie—Robert T. Lossman, Secretary  
 Hillsdale—John A. MacNeal, Secretary  
 Houghton-Baraga-Keweenaw—R. J. McClure, Secretary  
 Huron—J. Bates Henderson, Secretary  
 Livingston—Ray M. Duffy, Secretary  
 Luce—Sidney Franklin, Secretary  
 Manistee—C. L. Grant, Secretary  
 Mecosta-Osceola-Lake—John A. White, Secretary

Medical Society of North Central Counties—Stanley A. Stealy, Secretary  
 Menominee—Wm. S. Jones, Secretary  
 Muskegon—Helen S. Barnard, Secretary  
 Newaygo—H. R. Moore, Secretary  
 Oceana—W. Heard, Secretary  
 Ontonagon—W. F. Strong, Secretary  
 Sanilac—E. W. Blanchard, Secretary  
 Tuscola—John C. Shoemaker, Secretary

As of May 10, the above county medical societies have certified 1944 dues for every member of their respective societies, to be the first 100 per cent paid-up counties for this year. A number of other societies have certified all but one or two of their 1944 members. As soon as these have paid their 1944 dues the list of 100 per cent county societies will be much larger.

*American Public Health Association* will hold its Second Wartime Public Health Conference in New York City, October 3-4-5, Hotel Pennsylvania.

\* \* \*

*American Hospital Association* will hold its 46th Annual Convention in Cleveland, October 2-6, inclusive. The Statler Hotel will be headquarters.

\* \* \*

E. F. Skinner, M.D., Detroit, is the author of an

article "Lead Buttons for Intrapulmonary Localization," which appeared in *The Journal of Thoracic Surgery*, December, 1943.

\* \* \*

*The Upper Peninsula Medical Society* will hold its Annual Meeting at Houghton, Michigan, on Thursday and Friday, July 27 and 28. Charles R. Smith, M.D., Houghton, is secretary.

## Applying Scientific Principles to a Good Idea

Scientific principles applied to the early automobile brought improvements resulting in a device that changed a way of life.

There has long been a general agreement as to the particular merit of tar preparations in the treatment of eczema (1) and chronic industrial dermatoses (2). Application of scientific principles to that good idea have brought forward a modern therapeutic agent that retains the values inherent in the base tars, yet avoids the objectionable features of early whole tar preparations. It is Tarbonis Cream.

It is a pleasant vanishing type cream that is clinically nonallergic and nonirritating, without odor. It is antipruritic, and has a background of excellent clinical acceptance.

It is especially recommended in the treatment of infantile eczema, seborrheic and eczematoid dermatitis, and the many forms of industrial dermatoses.

An unusual interest, resulting in many requests for literature and samples, may cause a slight delay, but these requests will be met in the order they're received.

(1) Diseases of Infancy and Childhood, L. Emmett Holt, Jr., M.D., and Rustin McIntosh, M.D., 11th Ed., p. 905, D. Appleton-Century Co., New York, 1940.

(2) Occupational Diseases, R. T. Johnson, M.D., p. 455, W. B. Sanders Company, Philadelphia, 1941.

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*"Continuous Caudal Analgesia in Obstetrics"*—a motion picture in color—is available for showing before county medical societies and hospital staffs. This film was made at the U. S. Marine Hospital, Staten Island, by authorization of the Surgeon General, USPHS. For copies write Eli Lilly & Company, Indianapolis, Ind.

\* \* \*

*Max R. Burnell, M.D.*, Flint, is the author of an original article, "Health Maintenance Program for Women in Industry," which appeared in JAMA of March 11.

\* \* \*

*Roger V. Walker, M.D.*, Detroit, has been appointed a member of the Detroit Board of Health to succeed the late Frank A. Kelly, M.D. Congratulations, Dr. Walker!

\* \* \*

*James Milton Robb, M.D.*, Detroit, recently presented to the Wayne University College of Medicine, Detroit, a fund for the use of the Alpha Omega Alpha Scholarship and Lectureship Foundation.

\* \* \*

*"Eyes for Tomorrow"* is the title of a two-reel film which stresses good general health as a prerequisite for good eyesight. The film, in sixteen and thirty-five mm., is distributed by the National Society for the Prevention of Blindness, 1790 Broadway, New York.

\* \* \*

*Wm. A. Hyland, M.D.*, Grand Rapids, has been appointed chairman of the Grand Rapids Arrangements

Committee for the 1944 Annual Session of the Michigan State Medical Society. Dr. Hyland has served in this capacity on previous occasions and is well qualified to handle the many details of this position.

\* \* \*

*"The Organization of a Red Blood Cell Transfusion Service"* and *"Use of Salvaged Red Cells"* are the titles of original articles by W. B. Cooksey, M.D., Detroit, written in collaboration with Major Earl S. Taylor, MC, AUS, William Thalhimer, M.D., Detroit, and Capt. William H. Horwitz, MC, AUS, which appeared in JAMA of April 1.

\* \* \*

*Clipping Coupons* is always a profitable exercise, especially the coupons in the advertisements of friends who use the MSMS JOURNAL to carry their message to the Michigan medical profession. Many advertisers gauge reader interest by the number of coupons clipped and mailed to them by doctors of medicine. As a part owner of the MSMS JOURNAL, your personal interest will be served every time you clip an advertiser's coupon.

\* \* \*

The American Medical Association will meet in Chicago the week of June 12. The House of Delegates and the scientific meetings and exhibits will be housed in the Palmer House; the technical exhibits will be in the Stevens Hotel.

The transportation and hotel facilities of Chicago are likely to be packed to the utmost under war conditions;

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## COUNTY AND PERSONAL ACTIVITIES

those planning to attend the AMA Session should make necessary reservations now. The official announcement and hotel reservation blank will appear in the JAMA (advertising pages) in the near future.

\* \* \*

*Floyd E. Armstrong*, Professor of Economics and Finance and Head of the Department, Massachusetts Institute of Technology, Cambridge, Massachusetts, has addressed a number of Michigan groups on "Federal Bureaucracy" since his appearance at the MSMS Secretaries Conference of January 30 in Detroit. His schedule has been the following:

February 3, Peoples Forum, Battle Creek; February 29, Fifth Council Districts, Grand Rapids; March 7, Michigan Bottlers Association, Grand Rapids; March 9, Rotary Club, Muskegon; March 10, Woman's Auxiliary to Wayne County Medical Society, Detroit; March 28, Rotary Club, Traverse City; March 28, P.T.A., Lions-Women's Clubs, Newaygo; March 30, Kiwanis Club, Saginaw; April 12, Alma College, Alma; April 18, Kiwanis Club, Hillsdale; April 21, Rotary Club, Lansing; April 24, Chamber of Commerce, Fremont; April 25, Rotary-Kiwanis-W.A., Lapeer; May 3, Public Meeting—Auxiliary to Bay County Medical Society, Bay City; May 9, Rotary-Exchange-Lions Clubs, Birmingham; May 25, Public Meeting—Auxiliary to Manistee County Medical Society, Manistee.

\* \* \*

The Wayne County Medical Society's "Medical Information Service" is a central point of reference and assistance for people in the community needing medical care, or who otherwise are faced with health problems. This public service department is maintained by the Society in the headquarters building and is available 24 hours a day by telephone. An impartial rotating method is used in referring patients to doctors; three names are given in each instance, unless the inquirer has a family physician in which case advice is given to the effect that the family doctor is best qualified to recommend further necessary care. The records are arranged according to the various specialties, with general practitioners on a geographical basis. The Medical Information Service is kept up to date by periodic mailings of information blanks to all members of the Wayne County Medical Society.

\* \* \*

The Michigan Society of Neurology and Psychiatry held a symposium discussion on the subject of "Juvenile Delinquency" at the regular meeting of the Society in Detroit on March 16. The following members participated in the discussion: Drs. Raymond W. Waggoner, Ann Arbor—Infant, Child and the War; Gordon R. Brain, Flint—Juvenile Delinquency and Heredity; Robert H. Haskell, Northville—Racial Factors in Juvenile Delinquency; John M. Dorsey, Detroit—Juvenile Delinquency and the Home; Leo H. Bartemeier, Detroit—The Psychology of the Infant; Russell Costello, Detroit—Juvenile Delinquency and the Pediatrician; Harry J. Baker, Detroit—Juvenile Delinquency and the School; Ray H. Morter, Kalamazoo—Juvenile Delinquency and the Church; Lt. Col. Roscoe W. Cavell, MC, Detroit—Juvenile Delinquency and Neighborhood Influences; Thomas A. Gruber, Eloise—Juvenile Delinquency and the Radio, the Movies, and the Newspaper; Perry C. Robertson, Ionia—The Juvenile Criminal; Lowell S. Selling, Detroit—The Juvenile and the

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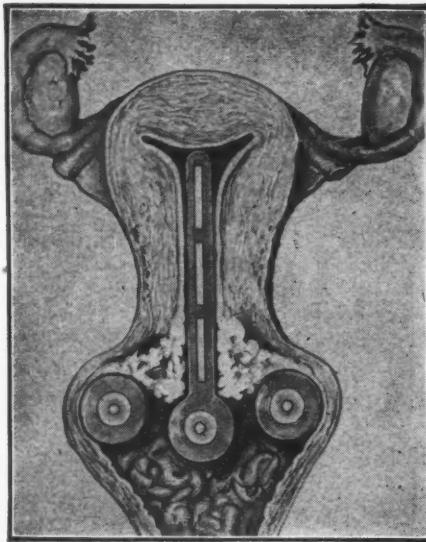
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\* \* \*

#### WOMEN AND CHILDREN EMPLOYED IN MICHIGAN

Children (fourteen to eighteen years) employed in Michigan in 1940 totaled 4500; in 1943 over 100,000 are employed, 83,000 full time and the balance part time.

The number of women and children employed in 1944 will be much higher than in 1943.

It is interesting to note that twice as many children were employed in 1943 as in 1942, many being used in shops and stores.

\* \* \*

#### \$130 BILLIONS IN SAVINGS

Individuals in the United States now have accumulated \$100,000,000,000 in savings accounts. In addition, industrial plants and organizations have accumulated savings of \$30,000,000,000.

It is estimated that the savings in 1944 will total \$36,000,000,000.

Ninety per cent of all debts in the United States are now paid by corporations and by individuals.

The annual income for the first two years after the war will be \$140,000,000,000, it is estimated. This is exactly twice as great as the annual income in 1929.

The annual market after the war is estimated to be \$100,000,000,000, for 5 years.

\* \* \*

#### NEW TAX LAW

Public Act 235 repeals earned income credit, freezes 1944 social security rate, increases rates on certain spirits, requires tax-exempt organizations to file returns, etc., and increases, on April 1, many rates (shown in part in the accompanying table):

Tax	Old Rate	New Rate
Admissions . . . . .	1c for each 10c	1c for ea. 5c
Cabarets . . . . .	5% of charge	30% of charge
Club dues . . . . .	11% of charge	20% of charge
Initiation fee . . . . .	11% of charge	20% of charge
Jewelry* . . . . .	10% retail pr.	20% retail pr.
Furs . . . . .	10% retail pr.	20% retail pr.
Toiletries . . . . .	10% retail pr.	20% retail pr.
Passenger fares . . . . .	10% of charge	15% of charge
Seats & berths . . . . .	10% of charge	15% of charge
Light bulbs . . . . .	5% mfg. price	20% mfg. pr.
Long dist. calls . . . . .	20% of charge	25% of charge
Telegrams, etc. . . . .	15% of charge	25% of charge
Local phone . . . . .	10% of charge	15% of charge
Pool tables . . . . .	\$10 per yr. ea.	\$20 per yr. ea.
Bowling alleys . . . . .	\$10 per yr. ea.	\$20 per yr. ea.
Luggage, etc. . . . .	10% mfg. pr.	20% retail pr.
Local 1st class mail . . . . .	2c an ounce	3c an ounce
Airmail . . . . .	6c per ounce	8c per ounce
Money order fee . . . . .		increased 66 2/3 %
Registry fees . . . . .		increased 33 1/3 %
Insured mail . . . . .		increased 100 %
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Acknowledgment of all books received will be made in this column and this will be deemed by us as a full compensation of those sending them. A selection will be made for review, as expedient.

**MINOR SURGERY.** By Frederick Christopher, S.D., M.D., F.A.C.S., Associate Professor of Surgery at Northwestern University Medical School, Chicago; Chief Surgeon at the Evanston (Ill.) Hospital. Fifth Edition, Reset. 1,006 pages with 575 illustrations. Philadelphia & London: W. B. Saunders Company, 1944. Price \$10.00.

This is an enlarged fifth edition of an already proven surgical textbook. It is designed to guide the practitioner through every conceivable minor surgical emergency, and deals with all the commoner fractures and industrial injuries as well. The first four chapters on wounds, wound healing, infections and burns are particularly good, and now include the latest treatment with the sulfonamides and newer preparations. The treatment routines established by the surgeon-general and the medical research council for the military services are outlined for the care of wounds and burns.

A new chapter deals with preoperative and postoperative care, including the treatment of shock, use of blood plasma, the treatment of dehydration and vitamin deficiencies, and an adequate discussion of the treatment of surgical situations which arise as the result of disturbed blood chemistry before and after operation.

Recent trends in fracture treatment are emphasized, including "paratrooper fracture." The chapter on the treatment of varicose veins and peripheral vascular diseases has been enlarged and excellent illustrations added. The author has a most comprehensive list of references on each topic, which makes this book an ideal guide to further study.

An excellent text to read from cover to cover.

**HUMAN CONSTITUTION IN CLINICAL MEDICINE.** By George Draper, M.D., Associate Professor of Clinical Medicine, College of Physicians and Surgeons, Columbia University; Associate Attending Physician, Presbyterian Hospital, New York City; C. W. Dupertuis, Ph.D., Physical Anthropologist, Constitution Clinic, Presbyterian Hospital, New York City; and J. L. Caughey, Jr., M.D., Med.Sc.D., Associate in Medicine, College of Physicians and Surgeons, Columbia University. New York and London: Paul B. Hoeber, Inc., Medical Department of Harper & Brothers, 1944.

A complete and satisfactory diagnosis involves studies of the patient that must include a complete understanding of that patient's constitution, heredity, environment, past medical history. In fact the patient's reaction to stresses and outside influences as they apply to the various organs or functions of the body. This book is an attempt to point out the vast survey that is made by the successful physician, giving some of the clinical applications of the many observations on genetics, androgeny, anthropometry, somatotypes, physiology. All these things influence the reactions of the patient to outward and inward stimuli, and it is the part of the experienced doctor to properly interpret and evaluate them. The book is very interesting, and attempts to point the way of the author's thesis, giving numerous examples, in an attempt to understand "the man within the patient."

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CANCER, A MANUAL FOR PHYSICIANS. By the Committee on Cancer of the Michigan State Medical Society, and the Michigan Department of Health. Lansing: The Michigan State Medical Society, 1944.

When this book first came off the press we had an opportunity to mention it editorially. There has now been time to evaluate it and the impression of the first few hours is sustained. The work is truly outstanding, as evidenced by the many calls from out of the state for copies. There are forty-four chapters averaging about five pages, including a study of the historical appearance and recognition of cancer, discussions of the nature, causes, classification, research, behavior, biopsy, etc., after which cancer in various parts and systems is considered. The following physicians and surgeons have contributed: John Alexander, C. E. Badgley, D. H. Bellinger (D.D.S.), Lawrence Berman, R. S. Breakley, W. J. Butler, J. H. Cobane, F. A. Coller, B. R. Corbus, A. S. Crawford, R. H. Cummings, C. E. DeMay, L. S. Fallis, A. C. Furstenberg, C. K. Hasley, W. A. Hyland, A. H. Kretchmar, N. R. Kretzschmar (Deceased), Isadore Lampe, K. E. Markuson, R. D. McClure, N. F. Miller, J. K. Ormond, R. J. Parsons, Grover C. Pemberthy, H. W. Plaggemeyer, H. M. Pollard, J. H. Pratt, H. K. Ransom, F. L. Rector, J. M. Robb, H. C. Saltzten, H. J. VandenBerg, E. C. Van der Heide, R. C. Wanstrom, C. N. Weller, C. V. Weller, W. W. Zuelzer and A. B. McGraw. This list speaks for the authenticity of the material presented. The book has been distributed to our members, and we urge careful study of it. It is the last word in cancer information and treatment.

APPLIED DIETETICS, The Planning and Teaching of Normal and Therapeutic Diets. By Francis Stern, Chief of Frances Stern Food Clinic, The Boston Dispensary, Assistant in Medicine, Tufts College Medical School, etc. Second Edition. Baltimore: The Williams & Wilkins Company, 1943. Price \$4.00

This is largely a teachers' manual about nutrition and the scientific formations of various diets for different purposes, therapeutic and other. It is crowded with tables of information, values, contents of various elements of diet in the several foods, and numerous diet outlines for the normal person, the obese, the diabetic, the allergic; also for spastic constipation, colitis, ulcer, liver disorder, and ketogenic diet, nephritis, pregnancy. It is a valuable reference book for the busy doctor.

ORAL PATHOLOGY, A Historical, Roentgenological, and Clinical Study of the Diseases of the Teeth, Jaws, and Mouth. By Kurt H. Thoma, D.M.D., Professor of Oral Surgery and Brackett Professor of Oral Pathology, Harvard University; Oral Surgeon and Chief of Dental Service, Massachusetts General Hospital, etc., Second Edition. With 1,388 Illustrations, Including 128 in Color. St. Louis: The C. V. Mosby Company, 1944. Price \$15.00.

A second edition in so few years speaks well for the excellence of this work.

This edition has been reviewed and brought up to date by including some of the rarer diseases that were omitted in the first. This volume is a complete text on all sorts of disease of the mouth, teeth, jaws, and is of primary interest to the oral surgeon and dental practitioner. It is a valuable reference for the medical man interested in diseases of this region, and should be

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available for study. The nose and throat practitioner will find it of especial value and help. It is replete with pictures and descriptions of tumors and diseases of the oral cavity, giving the pathogenesis, clinical findings and histopathology. There is no small type, the book is easily readable, and the illustrations adequate.

**SYNOPSIS OF OBSTETRICS.** By Jennings C. Litzenberg, B.Sc., M.D., F.A.C.S., Professor Emeritus of Obstetrics and Gynecology, University of Minnesota Medical School. With 157 Illustrations Including 5 in Color. Second Edition. St. Louis: The C. V. Mosby Company, 1943. Price \$5.00.

Professor Litzenberg has condensed into very small space a world of information and instruction on the subject. This manual is very complete, practical and printed in large type for easy reading. The style is clear, the descriptions full and logical and the illustrations very helpful. This book while small and compact is fully adequate and will fit into any obstetrician's handbag, so as to be always at hand when needed.

**GASTROENTEROLOGY (In Three Volumes).** Volume II, By Henry L. Bockus, M.D., Professor of Gastroenterology, University of Pennsylvania Graduate School of Medicine, and Colleagues at University of Pennsylvania Graduate School of Medicine. The Small and Large Intestine and Peritoneum Diagnosis and Treatment of Disorders of the Small Intestine, Colon, Peritoneum, Mesentery and Omentum. Fully Illustrated, Including Many in Colors. Philadelphia and London: W. B. Saunders Company, 1944. Price, three volumes, \$35.00.

Volume II of this set is just as outstanding as the first volume which was reviewed in these pages recently. The text is made up from the experiences of the author's associates in the University of Pennsylvania Graduate School of Medicine, and covers approximately a thousand pages. This set might well grace the library of any practitioner to his credit and great advantage, and is a must for the Gastroenterologist and the abdominal surgeon. We like this volume as well as the first.

**FUNDAMENTAL EXERCISES for Physical Fitness.** By Claire Colestock, A.B., M.A., Assistant Director of Physical Education, City Schools, Pasadena, California; and Charles Leroy Lowman, M.D., F.A.C.S., Chief of Staff, Orthopedic Hospital, Los Angeles, California. New York: A. S. Barnes and Company, 1943.

**MEDICAL PHYSICS.** Editor in Chief, Otto Glasser, Ph.D., Head, Department of Biophysics, Cleveland Clinic Foundation; Professor of Biophysics, Frank E. Bunts Educational Institute; Consulting Biophysicist, University Hospitals of Cleveland, Chicago: The Year Book Publishers, Inc., 1944. Price \$18.00.

From a long list of Associate Editors Dr. Glasser has secured well written and authentic articles giving the complete study of every kind of physical reaction or procedure that has to do with medicine. Every branch of medicine is covered, from anatomy and bacteriology to surgery and urology. Every subject is given, from capillary circulation to tissue culture, from disinfection to virus studies, from air conditioning and heating in surgery to special methods in urology. The book is in large pages with two columns, approximately the size of the *Journal AMA*. Audiometers take fourteen pages and the article is entirely up to date with the very latest interpretations. Color vision tests take 18 pages,

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and is one of the best treatises on the subject we have seen. Cosmic rays, bioelectricity, the electron microscope, photography, photometry, visual adaptation are a few of the subjects given marked attention. Roentgen cinematography, roentgenography and roentgen therapy take a hundred and fifty pages. Every article we have read goes into minute detail in the scientific exposition of the subject. A medical man who is a student of science, or interested in the many processes in the science of physics that he uses every day must be interested in this book. It brings between two covers literally a world of material the assembling of which would be a monumental task.

**SAFE CONVOY, The Expectant Mother's Handbook.** By William J. Carrington, A.B., M.D., F.A.C.S., Attending Gynecologist Atlantic City Hospital, Atlantic County Hospital for Nervous and Mental Diseases; Diplomate American Board of Obstetrics and Gynecology, Formerly Vice President American Medical Association. Philadelphia and New York: J. B. Lippincott Company, 1944. Price \$2.50.

To a prospective mother this book will prove a guide to healthier and happier months ahead, as well as a well ordered family life after the great event. Just the right kind of advice is given that will prove the most useful. Diet, vitamins, complications are made understandable to the prospective mother. There are also chapters on the feeding of the baby, and his care, also one on fatherhood that is worth reading. We think this an exceptionally good book to place in the hands of the young expectant parents.

**HANDBOOK OF NUTRITION, A Symposium Prepared Under the Auspices of the Council on Foods and Nutrition of the American Medical Association.** Chicago: American Medical Association, 1943.

The Council on Foods and Nutrition has gathered in this book many articles from the pages of the *American Medical Association Journal* bearing upon foods, values, nutrition, calories, iron, iodine, vitamins. Common and unusual foods are described with their composition, tables of caloric values as purchased, with an estimate of amount of waste. There are articles on feeding of the infant, children and the aged; the nutritive requirements in pregnancy and lactation, and the adequacy of American diets. These are all gathered in a convenient form, readily referred to, and authoritative.

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No. 6

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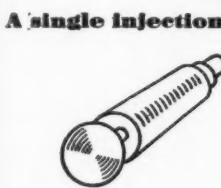
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JUNE, 1944

Say you saw it in the Journal of the Michigan State Medical Society

451

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for

## NEPHROPTOSIS

TOGETHER with treatment for any existing infection of the urinary tract, Camp Supports have proven valuable adjuncts in the relief of symptoms in many cases.

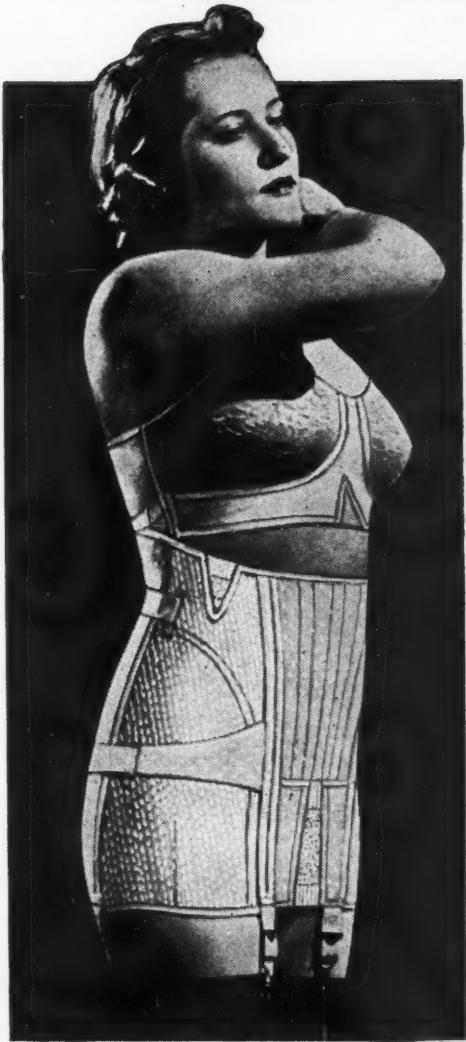
Camp-trained fitters have been instructed to consult the physician as to the position required for the fitting, if reclining or partial Trendelenburg. In the event that the physician desires the use of a pad, the fitter has been instructed to obtain information as to the type of pad to be used and to ask the doctor to mark on the garment or blue pencil upon the patient the exact location of the pad.



### *Advantages of Camp Supports in Conditions of Nephroptosis:*

1. The "lifting" power of Camp Supports is from below upward and backward.
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*Camp fitters ask patients to return to their physicians for approval of the fitting.*



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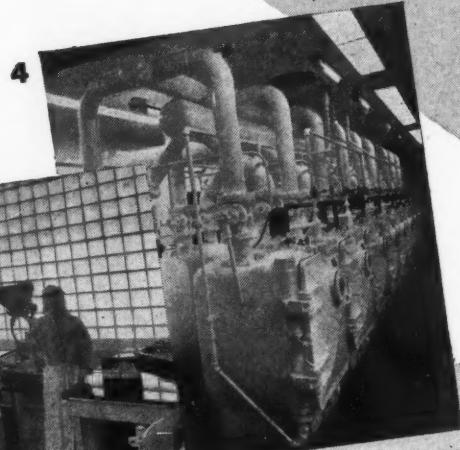
## An Achievement in PROTECTION AGAINST CONTAMINATION



1—Instead of the two-liter flasks in which penicillin ordinarily is made by "surface culture," Penicillin-C.S.C. is made in a battery of giant tanks, each of 12,000 gallon capacity, by "submerged culture," an operation of vastly increased sensitivity, calling for the utmost in care and control.

2—Vial-filling; note the safeguards against contamination.

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4—The "last word" in controlled vacuum-drying equipment. The number of these evaporators indicates the magnitude of Penicillin-C.S.C. production.

5—Vial-sealing and capping.

## THE "Sterile Area" IN THE PENICILLIN • C.S.C. PLANT

WALLS of highly polished opal glass and translucent glass brick, and rounded floor and ceiling abutments, permitting of maximum cleanliness—air-conditioning that controls temperature, humidity, and particle content—

sterilizing lamps that destroy air-borne microorganisms—

sterilizing-lamp-controlled "locks" that prevent undue airflow from room to room—

sterile clothing (masks, gowns, shoes, gloves) worn by all technicians—

facial shields which carry the technician's breath away from the work area—

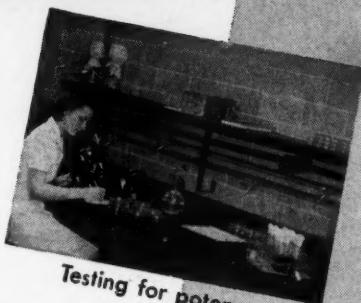
these are but a partial list of the safeguards employed in the "sterile area" of the C.S.C. plant.

Out of its quarter-century of research and experience in microbiotic production, Commercial Solvents Corporation has developed not only these safeguards, but also the "submerged culture" method which produces Penicillin-C.S.C. in giant three-story tanks.

This combination of mass production methods, skilled personnel, the utmost in safeguards, and unremitting laboratory control spells two assurances—

Penicillin-C.S.C. will always be of dependable potency, sterility, and pyrogen-freedom—

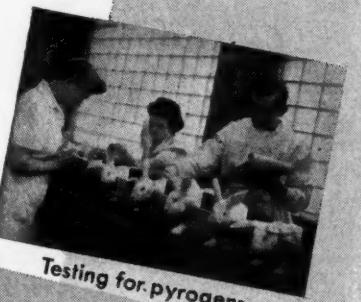
Penicillin-C.S.C., now allocated as the armed forces direct, will be available in adequate distribution throughout the country as soon as released.



Testing for potency



Testing for toxicity



Testing for pyrogens

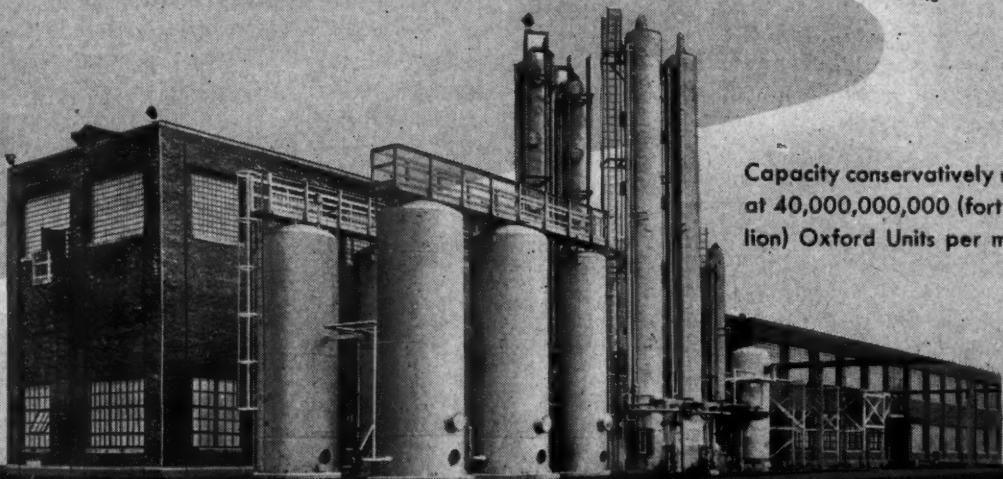
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Penicillin Plant  
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Capacity conservatively rated  
at 40,000,000,000 (forty billion)  
Oxford Units per month.

# WAR MEDICINE

## A MALARIA MOSQUITO SURVEY OF SOUTHERN MICHIGAN

CURTIS W. SABROSKY

Michigan State College

■ Michigan, although a highly malarial state in pioneer times, is scarcely given second thought in present-day discussions of malaria. It will average seventy to ninety endemic cases per year for the entire state, with occasional cases recorded in the Upper Peninsula.

Several recent trends have directed greater attention to the problem. Among these are the return of military personnel invalided home because of malaria, the influx in considerable numbers of southern laborers, and congested living conditions in war-swollen industrial areas leading to the rise of trailer camps and generally poorer protection against mosquitoes. With this background, it was highly desirable to investigate the malaria mosquito fauna of the state and to determine the extent and intensity of the Anopheline problem. Hence, in the summer of 1943, a mosquito survey of the southern and most populous portion of the state was carried out by the writer under the auspices of the Michigan Department of Health and Michigan State College. A detailed report of the survey is now in preparation as a technical bulletin from the latter institution. The present note will serve to make immediately available the general results of the season's work.

The survey extended from late July to early September and covered 4,512 miles in 31 counties, all located south of a line drawn from Muskegon through Midland and Saginaw Bay. A total of 660 stations were sampled, with a recorded total of 7,276 larvæ and pupæ, and uncounted thousands of adults, of which 4,907 larvæ-pupæ and 951 adults were brought to the laboratory and identified.

It was already known that there were only four species of *Anopheles* to consider in Michigan: *quadrimaculatus*, *punctipennis*, *walkeri*, and *occidentalis* (= *maculipennis* of authors, in part). Only a few adults of the last-named species were taken in the area covered, at several places in Midland and Tuscola Counties near the northern limits of the survey. Practically speaking, only three species occur in the region in significant numbers.

*Anopheles* mosquitoes were found to be abundant and widely distributed in the area. Of the 660 stations, 624 were sampled for larvæ, and of these 419 or approximately two-thirds (67.1 per cent) were found to be breeding *Anopheles*. A total of 7,276 larvæ and pupæ were recorded, an average of 17.36 per station. Adults were sampled only incidentally, but a total of 951 were actually identified. On occasion, estimates in the field ranged as high as 8,000 at a single location, which was

the conservative calculation for *A. quadrimaculatus* resting on the privy at a boys' camp.

One striking feature of the survey was the great abundance of *Anopheles quadrimaculatus*, the most important vector of malaria in eastern United States. It was breeding in 352 or 84 per cent of the 419 stations where *Anopheles* were found. Of the 4,907 larvæ brought into the laboratory and identified (the balance of the 7,276 represents a field count of first-instar larvæ), 3,685 or 75.09 per cent proved to be *quadrimaculatus*. *Punctipennis* and *walkeri* shared the remainder with 19.97 per cent and 4.94 per cent, respectively. For various reasons, it is considered unlikely that the true proportion of *quadrimaculatus* in nature is anywhere near as great as that. Nevertheless, this high percentage, and the fact that it was represented in 84 per cent of the positive stations, plus the large numbers taken in the adult survey, can only mean that it is a common and important factor in the mosquito fauna of the state. This is contrary to the belief in some quarters, that inasmuch as Michigan appears on published maps to be the northern limit of its range, it would be found here rather sparingly.

A second important fact established by the survey is that *quadrimaculatus* in Michigan is often found in combination with the other species. At over one quarter of the positive stations (110 or 26.2 per cent), there were two species of *Anopheles* breeding in the same habitat, one of them being *quadrimaculatus*. Rarely (6 stations), all three species were present. Expressed in terms of the 352 stations where *quadrimaculatus* larvæ were recorded, the species was the sole Anopheline in two-thirds (67.04 per cent) of the cases where it occurred, and in one-third (32.9 per cent) it was associated with either *punctipennis* or *walkeri*, or rarely both.

When the data were analyzed according to type of breeding place, a third major point was evident, at least for Michigan conditions, namely that *quadrimaculatus* breeds in some numbers in running waters which would not ordinarily be considered suitable. Of the 419 stations where *Anopheles* were found, 286 were classified as standing water (marshes, ponds, lake margins, old creek channels, etc.) and 133 as running water (rivers, creeks, drainage ditches, et cetera). As might be expected, 91.6 per cent of the former stations produced *quadrimaculatus*, with an average of 11.2 identified larvæ per station. Of the latter, two-thirds (67.6 per cent) of the stations had *quadrimaculatus*

(Continued on Page 460)

# A simple infant feeding formula:

$$\frac{1 \text{ fl. oz.}}{\text{BIOLAC}} + \frac{1\frac{1}{2} \text{ fl. ozs.}}{\text{WATER}} = \frac{2\frac{1}{2} \text{ fl. ozs.}}{\text{FORMULA}}$$

## New BIOLAC still easy to calculate!

THE CHANGED, more highly concentrated Biolac still saves you valuable time. There are no extra ingredients to calculate, because it's a complete infant formula\*.

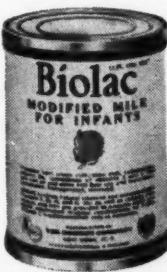
For standard formulas, simply dilute 1 fl. oz. of new Biolac with 1½ fl. ozs. water. Feed 2½ fl. ozs. of this formula daily for each pound of body weight.

### Why Biolac has been changed

To conserve tin, Biolac is more highly concentrated, and is now packaged in 13 fl. oz. cans instead of the former 16 fl. oz. size.

Although the new tin is a smaller size, it contains identically the same food values. And one can of Biolac still makes

one full quart of standard formula. The price remains the same.



NO LACK IN  
**BIOLAC**

Borden's complete  
infant formula\*



\*Biolac is prepared from whole milk, skim milk, lactose, vitamin B<sub>1</sub>, concentrate of vitamins A and D from cod liver oil, and ferric citrate. Evaporated, homogenized, sterilized. Vitamin C supplementation only is necessary. For detailed information, write to Borden's Prescription Products Division, 350 Madison Avenue, New York 17, N. Y.

## SOCIALISM AND NATIONAL WELFARE

CLAUDE R. KEYPORT, M.D.  
Grayling, Michigan

We are living in a changing world. This global war is making many changes and what the post-war period will do, or how it will change the present status of American Medicine, is anybody's guess.

Recently in an address before the Economic Club in Detroit, Dr. Ruthven, President of the University of Michigan, made this statement: "They who anticipate a return of the prewar world conditions are fated to be classified with those who throughout all history have stood ineffectively against social changes through their inability to read handwritings on the wall." What does this mean?

Life goes in cycles and just so, government goes in cycles. For years we have been leading up to the thing which now is beginning to alarm us, namely, the gradual encroachment of government in medicine. We have been asking for it. We have unconsciously been asking county government, state government, and finally, federal government to assume part or all of the financial load of caring for certain specified groups of people and certain types of illness, and as government has met our requests, this can only be interpreted as socialism.

Probably few people realize that this socialism has been under way ever since the dawn of the Christian era, and is already far advanced. The real question is, how much farther should socialism go in the interest of national welfare? In 1942, 97 per cent of the beds in mental hospitals and 85 per cent of those in tuberculosis sanatoria were in government hospitals; 48 per cent of the beds in general and special hospitals for acute disease were under some kind of government control in state, county or city.

By January 31, 1942, a fifth of all physicians in nonmilitary service held salaried positions: 7,216 in teaching positions, research, executive positions and industry; 9,819 in government service; 16,457 in hospital service (Journal AMA, June 20, 1942). Add to these, 45,000 or so brought into the armed forces since Pearl Harbor (exact figure is a military secret) and you may have between 30 and 45 per cent of our

176,000 physicians on salary depending on the percentage of those in the armed forces who were drawn from private practice.

President Roosevelt, in both his annual message to Congress on January 11, 1944, and in his budget message of January 13, urged the legislators to explore the possibility of a broad amendment to the Social Security Act. The people's supreme postwar objective, he said, is security in every essential economic, social and political sense. Without security, he declared, individual freedom cannot exist.

The President voiced the view that in the development of the nation there has emerged a bill of individual economic rights which supplements the constitutional bill of rights. These economic rights were described as including the right of everyone to have adequate medical care. Directly on Congress rests the responsibility of implementing the bill of economic rights, Mr. Roosevelt asserted. Legislation for that purpose was already before the House and Senate, he reminded his listeners (referring apparently to the Wagner-Murray-Dingell proposals among others).

A few days after the Chief Executive divested himself of these views, Mrs. Roosevelt added hers. Said she in her column, "My Day" that the draft showed our failures where health is concerned. The low-income groups can afford neither medical care, nor a proper diet. Nor can they afford decent clothing and housing. All of this contributes to lower health standards. Mrs. Roosevelt concluded by viewing with alarm, "the fact that we have no nation-wide social insurance measures to protect American families against disabilities and sickness."

In full agreement with the First Lady is Arthur J. Altmeyer, chairman of the Social Security Board, whose eighth annual report was made public on January 17, 1944. The Board urged a stronger and more comprehensive program of social security for the nation, including insurance to cover the costs of hospital and medical care. It added that "Lack of adequate measures to cope with sickness and disability represents the most serious gap in provisions for social security."

While the Chief Executive and various pressure  
(Continued on Page 460)

Extract of a paper delivered by President Keyport before the Saginaw County Medical Society, Saginaw, Michigan, April 18, 1944.

# Control Summer Diarrhea

**WITHOUT CONSTIPATING EFFECT...**

*with...*



**Zymenol** provides a twofold natural approach to the two basic problems of Common Diarrhea;

**NORMAL INTESTINAL CONTENT REESTABLISHED\***  
...through BREWERS YEAST ENZYMATIC ACTION\*

**NORMAL INTESTINAL MOTILITY RESTORED**  
...with COMPLETE NATURAL VITAMIN B COMPLEX\*

This twofold natural therapy assures normal bowel function without constipating astringents and absorptives, artificial bulkage or catharsis.

*Write For FREE Clinical Size*

\*Zymenol contains Pure Aqueous Brewers Yeast (no live cells)

## DOSAGE:

**At Onset:** Teaspoonful every hour until normal evacuation with proper stool consistency is restored.

**Follow with:** Teaspoonful before meals and at bed-time, reduce as indicated.

## SOCIALISM AND NATIONAL WELFARE

(Continued from Page 458)

groups were and are suggesting and urging more socialization in medicine, and while labor groups are asking for more security, believing that they would be getting something for nothing, we have had one of the best examples of a bureaucratic form of government thrust upon us. I refer to the Emergency Maternal and Infant Care program. This is definitely an entering wedge in the social program. It is being advertised by the U. S. Department of Labor. The following was released for Sunday papers, March 19, 1944:

"A quarter of a million wives and babies of servicemen have received or are receiving care under the Emergency Maternity and Infant Care Program, Katherine F. Lenroot, Chief of the Children's Bureau of the U. S. Department of Labor, announced today on the occasion of the first anniversary of this program. In February, more than 36,000 applications were approved, the largest number to date for any one month.

"The program is now in operation in all the States, the District of Columbia, Hawaii, and Puerto Rico. Considering the difficulties of establishing any nationwide program, Miss Lenroot said, something of a record has been set in this instance. Hardship undoubtedly resulted in many cases when servicemen's wives found themselves living in States where the care was not available. Now the last of the States have their program in operation.

"Congress to date has appropriated \$24,200,000 to extend to July 1 of this year, to provide hospital and medical care without cost to servicemen's wives during pregnancy, childbirth and for six weeks after the baby is born, and for the infant the first year. Families of men in the four lowest pay grades are eligible. The funds are administered by the Children's Bureau through State health departments."

From these quoted facts it is quite evident that political groups are most interested in expanding their power—and the people seem to forget the wise words of Winston Churchill who said: "We must beware of trying to build a society in which nobody counts for anything except a politician or an official, a society whose enterprise gains no reward and thrift no privileges."

*Registration Under the Harrison Narcotic Act.*—Physicians, other than those in the Armed Forces, who are registered under the Harrison Narcotic Act or under the Marihuana Tax Act must effect re-registration on or before July 1 to avoid a penalty. (See *JAMA*, June 3, p. 357.)

*National Wartime Graduate Medical Meeting Committee* invites you to its Second Michigan Clinic Day, at Fort Custer Station Hospital on Wednesday, June 21, 1 p.m. to 6 p.m., followed by a picnic supper at Eagle Lake, Station Hospital grounds.

## COUNCIL AND COMMITTEE MEETINGS

- Executive Committee of The Council—Olds Hotel, Lansing, February 24.  
Executive Committee of The Council—Olds Hotel Lansing, March 23.  
Procurement and Assignment Service Committee—Statler Hotel, Detroit, March 23.  
Maternal Health Committee, University Hospital—Ann Arbor, April 5.  
Executive Committee of The Council—Statler Hotel, Detroit, April 20.  
Joint Committee MSMS-State Bar—Olds Hotel, Lansing, April 23.  
MSMS Venereal Disease Control Committee—Olds Hotel, Lansing, April 23.  
Mental Hygiene Committee—David Whitney House, Detroit, April 27.  
Postgraduate Medical Education Committee—Statler Hotel, Detroit, May 3.  
Procurement and Assignment Service Committee—Statler Hotel, Detroit, May 11.  
Ethics Committee—Hayes Hotel, Jackson, May 14.  
Cancer Committee—Woman's League, Ann Arbor, May 23.  
Executive Committee of The Council—Statler Hotel, Detroit, May 24.

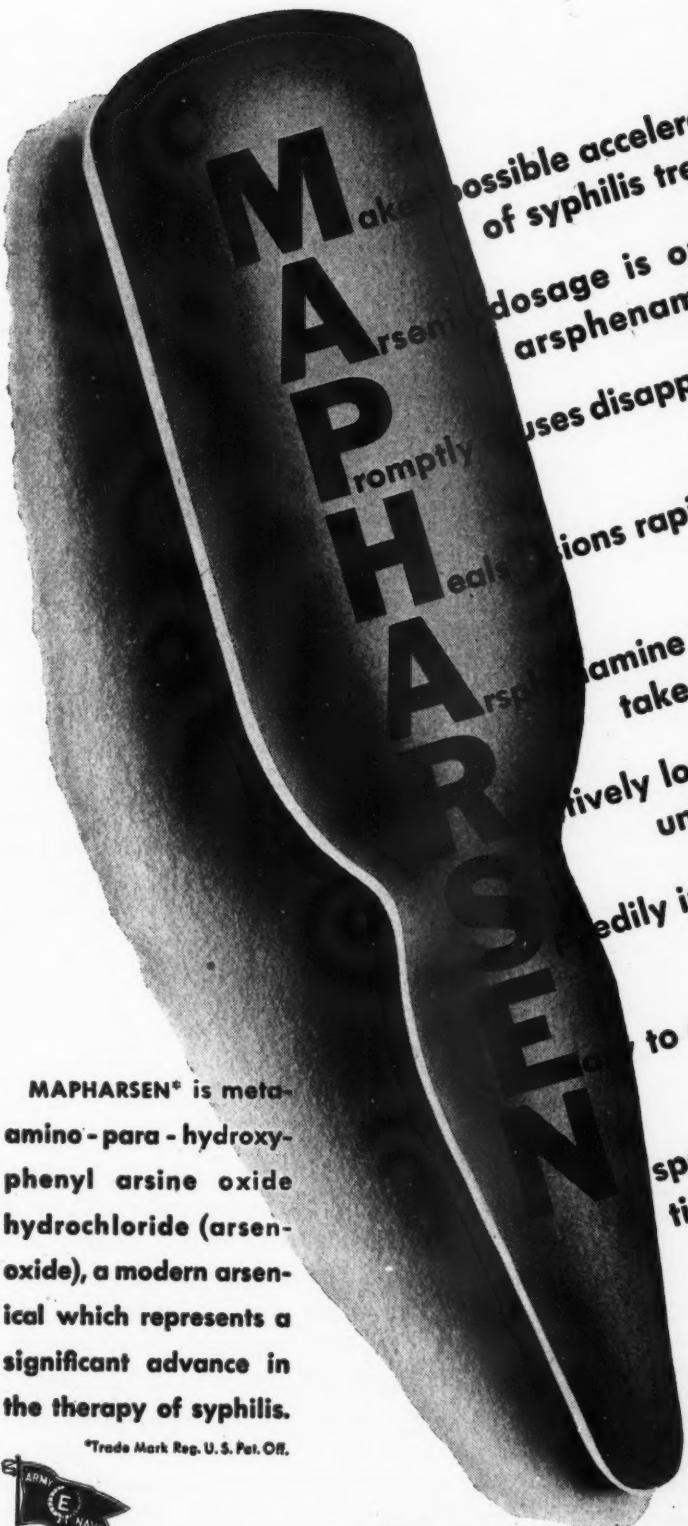
## A MALARIA MOSQUITO SURVEY OF SOUTHERN MICHIGAN

(Continued from Page 456)

*tus*, with an average of 8.1 identified larvæ per station. The important fact is not the smaller proportion of the second type, but the fact that so large a proportion of running water habitats did produce *quadrimaculatus*.

It is often stated that *punctipennis* is likely to be found in running waters and the data show that the species occurred in 63.9 per cent of the running water habitats, but only in 16.1 per cent of standing water types. This appears to be a rather significant difference. Another angle should also be noted, however, for even though *punctipennis* shows strong preference for running waters, still it was actually collected in fewer stations in such places than was *quadrimaculatus* (63.9 per cent as against 67.6 per cent for the latter).

In brief, it can only be concluded from such data that southern Michigan has a tremendous Anopheline population whose significant size has not hitherto been appreciated; that *Anopheles* mosquitoes are abundant and widely distributed by virtue of the state's great extent and frequency of lakes, marshes, pond holes, etcetera, and the miles and miles of drainage ditches and streams of all sizes; and that *Anopheles quadrimaculatus*, the most dangerous malaria vector of the eastern United States, is the most important and most frequently encountered Anopheline mosquito in the area. While not a cause for hysteria, it is, nevertheless, essential that the full import of the data be realized in a consideration of the malaria problem in relation to such matters of public health as were cited in the introduction.



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MSMS

JUNE, 1944

Say you saw it in the Journal of the Michigan State Medical Society

## FEDERAL SUBSIDIES

The real beginning of Federal subsidy legislation was the Morrill Act in 1857, establishing the system of land grant agricultural colleges. This was followed by other agricultural bills, and in 1916 Federal aid moved into the highway field and in 1918 into public health. In 1935, the program bloomed under the Social Security program.

A brief summary of the more important Federal aids follows:

*Public Health*, assisting states, counties and health districts to establish and maintain adequate public health services and personnel. Annual appropriation, \$11 million. No state matching appropriation required.

*General Disease Control*, begun in 1918 and amended in 1935. 1942 appropriation, \$7,817,000, with grants matched 100 per cent.

*Child Welfare*, begun in 1935 to establish the Children's Bureau to coöperate with state public welfare agencies for the care of homeless, dependent or neglected children. The authorization is \$1,510,000 annually. No matching state appropriation required.

*Crippled Children Services*, begun in 1935 to enable states to extend and improve service for crippled children, providing medical, surgical care. Authorization is \$3,870,000 annually. Matching state appropriation of 100 per cent usually required.

*Maternal and Child Health*, established 1935 to permit states to extend and improve services protecting health of mothers and children, particularly in rural or economically affected areas. Annual authorization, \$5,820,000. Matching state appropriation of 70 per cent to 100 per cent required.

*Federal Public Housing Authority*, provides for contributions to housing agencies to assist in achieving and maintaining low rent character of their housing projects. Annual contributions of \$28,000,000 are authorized; annual obligations now running about \$10,500,000. The receiving agency is required to contribute in tax remissions, tax exemptions or cash by at least 20 per cent of the amount of the Authority grant.

*The Social Security Act of 1935—Old Age Assistance*, provides aid to states in furnishing assistance to aged, needy individuals. Expenditures rose from \$124.6 million in 1937, to an estimated \$329 million in 1943. In general, the Federal grant is 50 per cent of the cost.

*Aid to Dependent Children*, to enable each state to furnish financial assistance to needy dependent children. 1943 estimated expenditures are \$78 million. Grants are made on a 50 per cent basis within prescribed limits.

*Aid to the Blind*, to aid states in providing financial assistance to the blind. Estimated expenditures for 1943 are \$8.7 million. Grants to be matched 50 per cent within limits.

*The United States Employment Service*, first established in 1933 on a state participating basis. Now an exclusive Federal activity under the War Manpower Commission.

*Unemployment Compensation State Administration* provides authorization of \$80 million each fiscal year for grants to states, although the Federal share of unemployment taxes runs more than \$125 million a year.

*Federal Aid Highways*, includes the Federal Aid Road Act to provide a national highway system; Secondary or Feeder Roads, first provided for in 1933; Grade Crossing Elimination, established 1933; and Public Lands Highways, established 1921. These cover various projects indicated by their titles. Involves authorization of \$141 million annually with various degrees of matching appropriations.

*Miscellaneous*: This group includes Forest Planting Stock; Forest Fire Coöperation; Wildlife Restoration; State Homes for Soldiers and Sailors, and State Marine Schools. Authorizations vary according to type of project; matching appropriation required in varying degrees. Not all states participate.

The trend of Federal Aid may best be considered by observing the patterns into which the types of aid fall. Prior to the depression, Federal payments to the states never reached an annual total of more than \$200,000,000, and the following table reflects the historical trend:

	Millions
1917 .....	\$ 13.6
1922 .....	124.3
1927 .....	134.1
1932 .....	264.7
1937 .....	393.7
1942 .....	693.9

With Federal money goes Federal control, the conditions and limitations on states increased and strengthened with each new grant, with the result that Federal Bureau chiefs now excise a veto over many state activities. The resulting rupture between national fiscal control and our original political forms based on state independence has resulted in a deterioration of the latter with Federal "leverage" on the states introducing a factor which the states to date have not circumvented.—*Michigan Public Expenditures Survey, Detroit*.

Circular operating rooms at the Marinette General Hospital utilize space to the best advantage and have proved very satisfactory in operations. The two major rooms are 18 feet in diameter, the minor ones, 15 feet—*Hospitals*, April, 1944.

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Literature on request.



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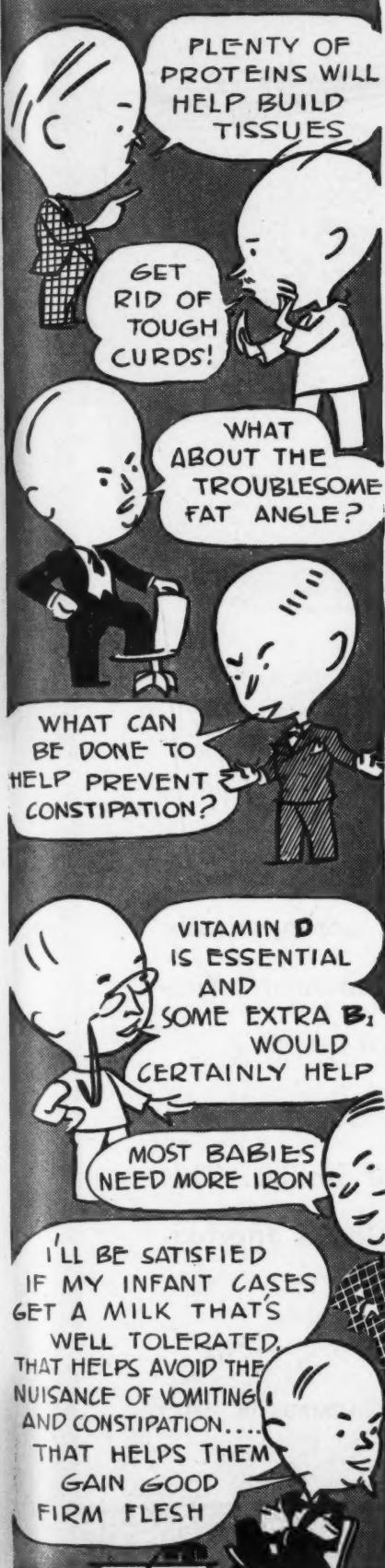
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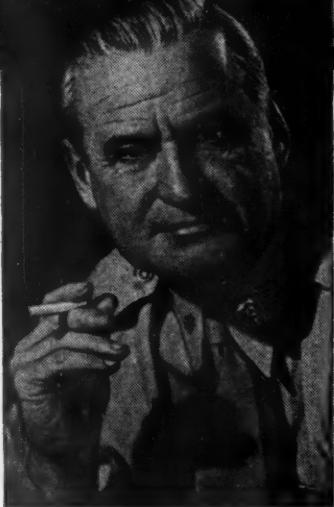
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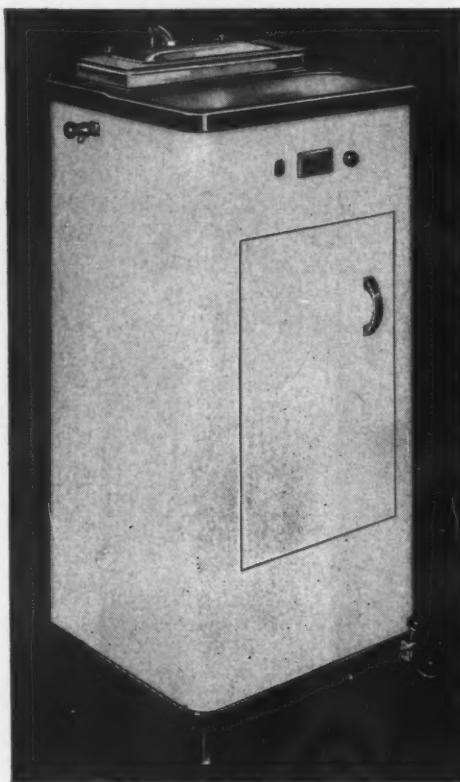
New reprint available on cigarette research — Archives of Otolaryngology, March, 1943, pp. 404-410.  
Camel Cigarettes, Medical Relations Division, One Pershing Square, New York 17, N. Y.

JUNE, 1944

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469

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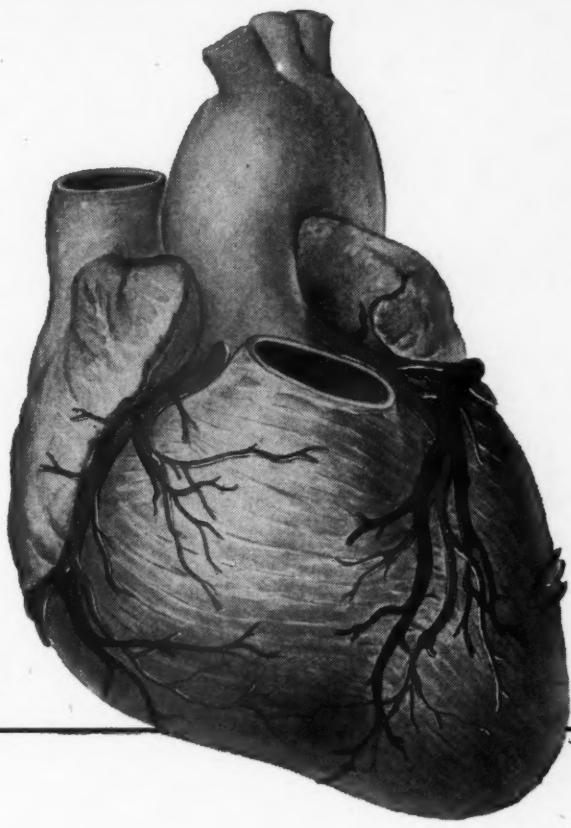


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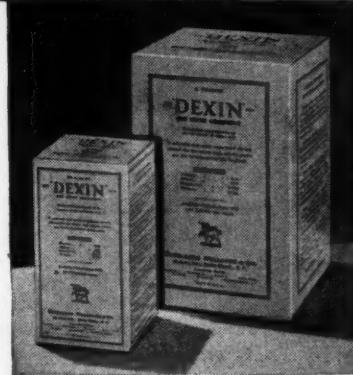
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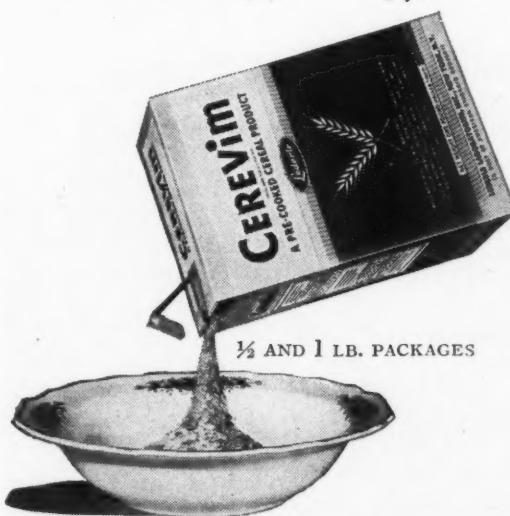
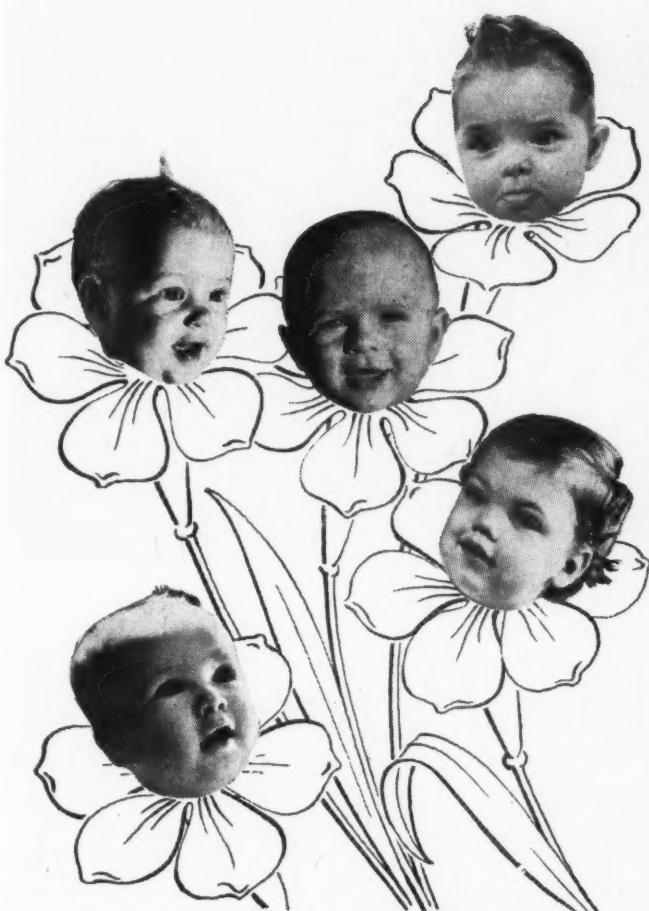
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